Welcome to STN International! Enter x:X

LOGINID:SSPTABEM1624

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

*	* *	* *	* *	* *	* Welcome to STN International * * * * * * * * * *
N	EWS	1			Web Page for STN Seminar Schedule - N. America
N	EWS	2	DEC	01	ChemPort single article sales feature unavailable
N	EWS	3	JAN	06	The retention policy for unread STNmail messages
					will change in 2009 for STN-Columbus and STN-Tokyo
N	EWS	4	JAN	07	WPIDS, WPINDEX, and WPIX enhanced Japanese Patent
					Classification Data
N	EWS	5	FEB	02	Simultaneous left and right truncation (SLART) added
					for CERAB, COMPUAB, ELCOM, and SOLIDSTATE
N	EWS	6	FEB		GENBANK enhanced with SET PLURALS and SET SPELLING
N	EWS	7	FEB		Patent sequence location (PSL) data added to USGENE
N	EWS	8	FEB	10	COMPENDEX reloaded and enhanced
N	EWS	9	FEB	11	WTEXTILES reloaded and enhanced
N	EWS	10	FEB	19	New patent-examiner citations in 300,000 CA/CAplus
					patent records provide insights into related prior
					art
N	EWS	11	FEB	19	Increase the precision of your patent queries use
					terms from the IPC Thesaurus, Version 2009.01
N	EWS	12	FEB	23	Several formats for image display and print options
					discontinued in USPATFULL and USPAT2
N	EWS	13	FEB	23	MEDLINE now offers more precise author group fields
					and 2009 MeSH terms
N	EWS	14	FEB	23	TOXCENTER updates mirror those of MEDLINE - more
					precise author group fields and 2009 MeSH terms
N	EWS	15	FEB	23	Three million new patent records blast AEROSPACE into
					STN patent clusters
N	EWS	16	FEB	25	USGENE enhanced with patent family and legal status
					display data from INPADOCDB
M	EWS	Ι/	MAR	06	INPADOCDB and INPAFAMDB enhanced with new display formats
		- 0			
IVI	EWS	18	MAR	11	EPFULL backfile enhanced with additional full-text
2.77	EWS	10	MAR	11	applications and grants ESBIOBASE reloaded and enhanced
	EWS		MAR		CAS databases on STN enhanced with new super role
TAT	EWS	20	PLIME	20	for nanomaterial substances
NI	EWS	21	MAR	22	CA/CAplus enhanced with more than 250,000 patent
141	EWD	21	ITAL	23	equivalents from China
M	EWS	22	MAR	3.0	IMSPATENTS reloaded and enhanced
	EWS		APR		CAS coverage of exemplified prophetic substances
141	шпо	23	III IV	0.5	enhanced
M	EWS	24	APR	0.7	STN is raising the limits on saved answers
14,			111 11		orn to reading the finite on bavea answers
M	EWS	EXP	RESS	JUNI	E 27 08 CURRENT WINDOWS VERSION IS V8.3,
					CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.
N	EWS	HOUL	RS	STI	N Operating Hours Plus Help Desk Availability
N	EWS	LOG:	IN		lcome Banner and News Items

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN customer agreement. This agreement limits use to scientific research. Use for software development or design, implementation of commercial gateways, or use of CAS and STN data in the building of commercial products is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 17:35:01 ON 24 APR 2009

=> fil reg

COST IN U.S. DOLLARS

SINCE FILE ENTRY

NTRY SESSION 0.22 0.22

TOTAL

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 17:35:21 ON 24 APR 2009 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2009 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 23 APR 2009 HIGHEST RN 1138395-00-2 DICTIONARY FILE UPDATES: 23 APR 2009 HIGHEST RN 1138395-00-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2009.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>

Uploading C:\Program Files\STNEXP\Queries\10552426narrowest.str

```
ring nodes :
1 2 3 4 5 6 7 8 9 10 12 13 14 15 16 17 19 20 21 22 23
ring/chain nodes :
18
chain bonds :
7-18 9-12 18-19
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 12-13 12-17 13-14 14-15
15-16 16-17 19-20 19-23 20-21 21-22 22-23
exact/norm bonds :
7-18 18-19 19-20 19-23 20-21 21-22 22-23
exact bonds :
9-12
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 12-13 12-17 13-14 14-15
15-16 16-17
isolated ring systems :
```

Match level :

containing 1 : 12 :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:CLASS 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 20:Atom 20:Ato

L1 STRUCTURE UPLOADED

=> d 11 L1 HAS NO ANSWERS L1 STR

Structure attributes must be viewed using STN Express query preparation.

=> s 11 SAMPLE SEARCH INITIATED 17:38:14 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 38 TO ITERATE

100.0% PROCESSED 38 ITERATIONS 3 ANSWERS SEARCH TIME: 00.00.01

L2 3 SEA SSS SAM L1

=> s l1 sss full

FULL SEARCH INITIATED 17:38:18 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 815 TO ITERATE

100.0% PROCESSED 815 ITERATIONS 59 ANSWERS

SEARCH TIME: 00.00.01

L3 59 SEA SSS FUL L1

=> d scan

L3 59 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN

IN Ethanone, 1-[2,3-dihydro-5-[[2-(4-pyridinyl)-4-quinazolinyl]amino]-1Hindol-1-yl]-

MF C23 H19 N5 O

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

L3 59 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN

IN 1H-Inden-2-o1, 2,3-dihydro-1-[[7-methyl-2-(4-pyridinyl)-4-quinazolinyl]amino]-, (1S,2R)-

F C23 H20 N4 O

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L3 59 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
- IN 2-Naphthalenol, 3-[[2-(4-pyridinyl)-4-quinazolinyl]amino]-
- MF C23 H16 N4 O

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> fil cap COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 188.28 188.50

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 17:38:43 ON 24 APR 2009 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications.

The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 24 Apr 2009 VOL 150 ISS 18 FILE LAST UPDATED: 23 Apr 2009 (20090423/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d his

```
(FILE 'HOME' ENTERED AT 17:35:01 ON 24 APR 2009)
```

FILE 'REGISTRY' ENTERED AT 17:35:21 ON 24 APR 2009

.1 STRUCTURE UPLOADED

L2 3 S L1 L3 59 S L1 SSS FULL

00 0 21 000 1022

FILE 'CAPLUS' ENTERED AT 17:38:43 ON 24 APR 2009

=> s 13

L4 15 L3

=> s 15 and (pry<2004)

L5 NOT FOUND

The L-number entered could not be found. To see the definition of L-numbers, enter DISPLAY HISTORY at an arrow prompt (=>).

=> s 14 and (pry<2004)

4270617 PRY<2004

L5 12 L4 AND (PRY<2004)

=> s 1-12 ibib abs hitstr 10110032 1

1630991 12

16 IBIB 250982 ABS

4 ABSES 250986 ABS

(ABS OR ABSES)

0 1-12 IBIB ABS HITSTR

(1(W)12(W)IBIB(W)ABS(W)HITSTR)

=> d 15 1-12 ibib abs hitstr

L5 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2004:902403 CAPLUS

DOCUMENT NUMBER: 141:374752

TITLE: Heterocyclic compound modulators of kinases,

particularly Tie-2 kinase, and use in the treatment of kinase-dependent diseases

INVENTOR(S): Ibrahim, Mohamed; Leahy, James; Sangalang, Joan C.;

Schnepp, Kevin; Shi, Xian; Nuss, John

Exelixis, Inc., USA PCT Int. Appl., 91 pp. CODEN: PIXXD2

English

DOCUMENT TYPE: Patent

LANGUAGE:

PATENT ASSIGNEE(S): SOURCE:

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

	PATENT NO.			DATE		I	APPL:	ICAT	ION	NO.		D	ATE		
	WO 2004092196	A	2	200410	28	WO 2004-US10858						2	0040	408	<-
	WO 2004092196			200503											
	W: AE, AG,														
	CN, CO,														
	GE, GH,														
	LK, LR,														
	NO, NZ,														
		TN, TR													
	RW: BW, GH,														
	BY, KG,														
	ES, FI,														
	SK, TR,	BF, BJ	CF,	CG, C	CI, C	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	
	TD, TG														
	AU 2004230928	A	1	200410	28				2309				0040		
	CA 2520323	A		200410					2520						
	EP 1610774	A		200601					7498				0040		
	R: AT, BE,														
		LT, LV													
	JP 2006523238 US 20070161651	T		200610)12	Ċ	JP 20	06-	5098	20		2	0040	408	<-
	US 20070161651	A	1	20070	712	Ţ	JS 20	005-	5524	26		2	0051	007	<-
RIC	RITY APPLN. INFO	. :				Ţ	JS 20	003-	4614 US10	46P		P 2	0030	409	<-
							10 20	004-	US10	858		A 2	0040	408	
	R SOURCE(S):														
3	The invention p													С	
	activity for mo														
	differentiation														
	Compds. of the														
	particularly Ti														
	compns. thereof														als
	an aspect of th			. Prep	parat	ior	ı of	qui	nazo	line	com	pds.	of	the	
	invention is de														
	332850-36-9P 78														
	781615-29-0P 78														
	781615-39-2P 78														
	781615-42-7P 78			781615-	-60-9	PΡ									
	781615-61-0P 78														
	RL: PAC (Pharma														
	(Therapeutic us	e); BIO	L (B:	iologio	cal s	stuc	iy);	PRE	P (P.	repa	rati	on);	USE	S	
	(Uses)														
	(heterocycli										ular	ly T	ie-2	kir	as
	and use in t		of.	kinase	e-dep	enc	lent	dis	ease	s)					
	332850-36-9 CA	PLUS													
a .	4-Ouinazolinami	no Mac	2010	- 1 rv a c	-14-	-nw	-idi	1 [120	- 0	ים מי	MDEY	NAM	E)		

CN 4-Quinazolinamine, N-cyclohexyl-2-(4-pyridinyl)- (CA INDEX NAME)

RN 781615-21-2 CAPLUS

CN 4-Quinazolinamine, N-cyclopenty1-2-(4-pyridiny1)- (CA INDEX NAME)

RN 781615-27-8 CAPLUS

CN 4-Quinazolinamine, N-(2,3-dihydro-1H-inden-1-y1)-2-(4-pyridinyl)- (CA INDEX NAME)

RN 781615-29-0 CAPLUS

CN 4-Quinazolinamine, 2-(4-pyridiny1)-N-[(2R)-1,2,3,4-tetrahydro-2-naphthaleny1]- (CA INDEX NAME)

- RN 781615-32-5 CAPLUS
- CN 4-Quinazolinamine, 2-(4-pyridinyl)-N-[(2S)-1,2,3,4-tetrahydro-2-naphthalenyl]- (CA INDEX NAME)

Absolute stereochemistry.

- RN 781615-35-8 CAPLUS
- CN 1H-Inden-2-ol, 2,3-dihydro-1-[[2-(4-pyridinyl)-4-quinazolinyl]amino]-, (1S,2R)- (CA INDEX NAME)

- RN 781615-39-2 CAPLUS
- CN 4-Quinazolinamine, N-[(1S,2S)-2-(phenylmethoxy)cyclopentyl]-2-(4pyridinyl)- (CA INDEX NAME)

Absolute stereochemistry.

RN 781615-40-5 CAPLUS

CN 1,4-Benzenediamine, N1-phenyl-N4-[2-(4-pyridinyl)-4-quinazolinyl]- (CA INDEX NAME)

RN 781615-41-6 CAPLUS

CN 2-Naphthalenol, 3-[[2-(4-pyridinyl)-4-quinazolinyl]amino]- (CA INDEX NAME)

RN 781615-42-7 CAPLUS

CN 4-Quinazolinamine, N-[4-(1-methylethoxy)phenyl]-2-(4-pyridinyl)- (CA INDEX NAME)

RN 781615-59-6 CAPLUS

CN 1H-Inden-2-ol, 1-[[2-(2-ethyl-4-pyridinyl)-4-quinazolinyl]amino]-2,3-dihydro-, (1S,2R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 781615-60-9 CAPLUS

CN 1H-Inden-2-o1, 1-[[2-(2-ethyl-4-pyridinyl)-4-quinazolinyl]amino]-2,3dihydro-, (1R,2S)- (CA INDEX NAME)

- RN 781615-61-0 CAPLUS
- CN 1H-Inden-2-ol, 1-[[6-bromo-2-(4-pyridiny1)-4-quinazoliny1]amino]-2,3-dihydro-, (1S,2R)- (CA INDEX NAME)

Absolute stereochemistry.

- RN 781615-64-3 CAPLUS
- CN 1H-Inden-2-ol, 2,3-dihydro-1-[[2-(4-pyridinyl)-7-(trifluoromethyl)-4-quinazolinyl]amino]-, (1S,2R)- (CA INDEX NAME)

IT 781615-62-1 781615-67-6

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(heterocyclic compound modulators of kinases, particularly Tie-2 kinase, and use in treatment of kinase-dependent diseases)

RN 781615-62-1 CAPLUS

N 1H-Inden-2-ol, 1-[[6,7-dimethoxy-2-(4-pyridiny1)-4-quinazoliny1]amino]-2,3-dihydro-, (15,2R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 781615-67-6 CAPLUS

CN 1H-Inden-2-o1, 2,3-dihydro-1-[[7-methyl-2-(4-pyridinyl)-4-quinazolinyl]amino]-, (1S,2R)- (CA INDEX NAME)

Absolute stereochemistry.

IT 781615-84-7P

RL: SPN (Synthetic preparation); PREP (Preparation) (heterocyclic compound modulators of kinases, particularly Tie-2 kinase, and use in treatment of kinase-dependent diseases)

RN 781615-84-7 CAPLUS

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 2 OF 12 CAPLUS COPYRIGHT 2009 ACS on STN 2004:534191 CAPLUS

ACCESSION NUMBER: DOCUMENT NUMBER: 141:89100

TITLE:

Preparation of (quinazolin-4-vl)amines as capsaicin

receptor modulators INVENTOR(S):

Bakthavatchalam, Rajagopal; Blum, Charles A.; Brielmann, Harry; Caldwell, Timothy M.; De Lombaert,

Stephane; Hodgetts, Kevin J.; Zheng, Xiaozhang

US 2002-433139P

WO 2003-US39606

P 20021213 <--W 20031212 <--

PATENT ASSIGNEE(S): Neurogen Corporation, USA

SOURCE: PCT Int. Appl., 226 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

> PATENT NO. KIND DATE APPLICATION NO. DATE WO 2004055003 A1 20040701 WO 2003-US39606 20031212 <--W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG CA 2509233 20040701 CA 2003-2509233 A1 20031212 <--AU 2003296984 AU 2003-296984 20031212 <--A1 20040709 US 20040156869 A1 20040812 US 2003-735607 20031212 <--EP 2003-813410 EP 1569925 A1 20050907 20031212 <--R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK BR 2003017168 Α 20051101 BR 2003-17168 20031212 <--CN 1726205 Α 20060125 CN 2003-80105815 20031212 <--JP 2006515846 т 20060608 JP 2004-560827 20031212 <--MX 2005006123 Α 20050930 MX 2005-6123 20050608 <--

OTHER SOURCE(S): MARPAT 141:89100

PRIORITY APPLN. INFO.:

RN

CN

AB Title compds. I [wherein V, W, X, Y, and Z = independently N, CR1, with the proviso that at least one of V and X = N; R = OR7, NR3R4; R1 = independently H, halo, OH, CN, NH2, (halo)alkyl, (halo)alkoxy, alkoxycarbonyl, (di)alkylamino; R3 and R4 = independently H, (un) substituted (aryl) alkyl, alkenyl, alkynyl, alkanoyl, etc.; or R3 or R4 taken together with R5 or R6 forms an (un) substituted heterocycle; or NR3R4 = heterocyclyl; R5 and R6 = independently H, (un)substituted alkyl; or CR5R6 = CO; R7 = H, (aryl)alkyl, alkenyl, alkynyl, alkanoyl, etc.; or R7 taken together with R5 or R6 forms an (un)substituted heterocycle; n = 1-3; Ar1 and Ar2 = independently (un)substituted aryl, heterocyclyl; and pharmaceutically acceptable forms thereof] were prepared as modulators of capsaicin receptors, especially the vanilloid receptor 1 (VR1). For example, a solution of [2-(chloromethyl)-7-(3-trifluoromethylpyridin-2-yl)quinazolin-4yl] (4-trifluoromethylphenyl) amine HCl and pyrrolidine was heated to 100° for 1 h to give II. In competition binding assays, invention compds. exhibited Ki ≤ 1 µM for VR1 expressed in human embryonic kidney (HEK293) cells. Thus, I and their pharmaceutical compns. are useful for treating disorders associated with pathol. receptor activation, such as pain, in humans, domesticated companion animals, and livestock animals (no data). 573686-39-2P

ΙI

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(VR1 inhibitor; preparation of (quinazolin-4-yl)amines as VR1 inhibitors for treatment of pain and other VR1-mediated conditions) 573686-39-2 CAPLUS

4-Quinazolinamine, 2-(4-pyridinyl)-N-[4-(trifluoromethyl)phenyl]-7-[3-(trifluoromethyl)-2-pyridinyl]- (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2009 ACS on STN 2004:531361 CAPLUS

ACCESSION NUMBER:

DOCUMENT NUMBER: 141:76702

Combination therapy comprising a heteroarylamine VR1 TITLE: antagonist and a narcotic analgesic for the treatment

of pain with reduced addictive side effects INVENTOR(S): Herzberg, Uri; Cortright, Daniel; Hurtt, Mark M.;

Krause, James E.

PATENT ASSIGNEE(S): Neurogen Corporation, USA SOURCE: PCT Int. Appl., 182 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

						_									_			
	TENT :				KIN		DATE				ICAT.					ATE		
					A1												 119 <-	_
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
																ΚZ,		
																ΝI,		
																SY,	TJ,	
							UA,											
	RW:															AM,		
																DK,		
																SI,		_
	0500																TD, T	
																	119 <-	
																	119 <- 119 <-	
																	119 <- 119 <-	
EP																	PT,	
	R:																PI,	
TD	2006																119 <-	_
PRIORIT					_		2000	0400									213 <-	
LINIONII	A LIEF	D14 .	1141 0	• •													119 <-	
										2					. 4	J U J I		

AB The invention relates to compns. comprising a nontoxic vanilloid receptor 1 (VR1) antagonist, optionally in combination with an addictive therapeutic agent, for the treatment of pain. Compns. and methods are further provided for inhibiting the development of tolerance to addictive therapeutic agents (especially narcotic analgesics) in patients treated with such agents, for minimizing adverse effects (e.g., dependence) resulting from treatment with such addictive agents, and for enhancing pain relief resulting from narcotic analgesic administration. Patients may be treated with a VR1 antagonist before, during, or after administration of the addictive therapeutic agent to prevent, decrease the severity of, delay, or treat tolerance and/or other adverse effects of the addictive agent in the patient. Examples include synthetic methods and limited data for the preparation of representation heteroarylamine VR1 antagonists, as well as capsaicin receptor binding assays and numerous pain model assays. For instance, coupling of 7-bromo-4-chloroguinazoline with 2-amino-5-trifluoromethylpyridine, followed by addition of 3-fluoro-2-tributylstannylpyridine provided I. In a bioassay testing the inhibition of tolerance to morphine, rats receiving morphine plus II exhibited statistically significantly higher withdrawal thresholds than any other treatment group, indicating that the VR1 antagonist prevents tolerance to repeated morphine dosing.

T 573686-39-2

RL: PRPH (Prophetic)

(Combination therapy comprising a heteroarylamine VR1 antagonist and a narcotic analgesic for the treatment of pain with reduced addictive side effects)

RN 573686-39-2 CAPLUS

CN 4-Quinazolinamine, 2-(4-pyridiny1)-N-[4-(trifluoromethy1)pheny1]-7-[3-(trifluoromethy1)-2-pyridiny1]- (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:931342 CAPLUS

DOCUMENT NUMBER: 140:791

TITLE: Treatment of fibroproliferative disorders using

TGF-β inhibitors

INVENTOR(S): Chakravarty, Sarvajit; Dugar, Sundeep; Higgins, Linda S.; Kapoun, Ann M.; Liu, David Y.; Schreiner, George

F.; Protter, Andrew A.; Tran, Thomas-Toan

PATENT ASSIGNEE(S): Scios, Inc., USA

SOURCE:

PCT Int. Appl., 114 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE WO 2003097615 A1 20031127 WO 2003-US15514 20030516 <--W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG AU 2003229305 AU 2003-229305 A1 20031202 20030516 <--US 20040038856 US 2003-440428 A1 20030516 <--EP 1511738 A1 EP 2003-726892 20030516 <--R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK PRIORITY APPLN. INFO.: US 2002-381720P P 20020517 <--A 20030516 <--US 2003-440428

OTHER SOURCE(S): MARPAT 140:791

AB The invention concerns methods of treating fibroproliferative disorders associated with TGF- β signaling, by administering non-peptide small molinhibitors of TGF- β specifically binding to the type I TGF- β receptor (TGFB-R1). Preferably, the inhibitors are quinazoline

WO 2003-US15514

W 20030516 <--

derivs. The invention also concerns methods for reversing the effect of TGF- β mediated cell activation on the expression of a gene associated with fibrosis, comprising contacting a cell or tissue in which the expression of such gene is altered as a result of TGF- β mediated cell activation, with a non-peptide small mol. inhibitor of $TGF-\beta$, specifically binding a TGFβ-R1 receptor kinase present in the cell or tissue.

157862-99-2 627535-99-3

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(treatment of fibroproliferative disorders using TGF-β inhibitors) 157862-99-2 CAPLUS

RN

CN 4-Quinazolinamine, N-phenyl-2-(4-pyridinyl)- (CA INDEX NAME)

RN 627535-99-3 CAPLUS

CN 4-Quinazolinamine, N-2-naphthalenyl-2-(4-pyridinyl)- (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD, ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2003:591156 CAPLUS

DOCUMENT NUMBER: 139:149640

TITLE: Preparation of substituted guinazolin-4-vlamine analogs as VR1 capsaicin receptor antagonists for

relieving pain Bakthavatchatam, Rajagopal; Blum, Charles A.; INVENTOR(S):

Brielmann, Harry L.; Caldwell, Timothy M.; De Lombaert, Stephane

Neurogen Corporation, USA PATENT ASSIGNEE (S):

SOURCE: PCT Int. Appl., 294 pp. CODEN: PIXXD2

DOCUMENT TYPE: Pat.ent.

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

> PATENT NO. KIND DATE APPLICATION NO. DATE

```
WO 2003062209 A2 20030731 WO 2003-US1563 20030117 <--
WO 2003062209 A3 20030904
                        A3 20030904
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
            PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
            UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
            KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
            FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF,
            BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
    CA 2473796
                         A1 20030731 CA 2003-2473796 20030117 <--
                            20041026 BR 2003-6982
20041103 EP 2003-703887
    BR 2003006982
                         A
                                                                 20030117 <--
    EP 1471910
                         A2
                                                                 20030117 <--
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
                               20050615 CN 2003-802452
    CN 1627944
                         Α
                                                                 20030117 <--
    HU 2005000200
                         A2
                               20050728
                                          HU 2005-200
                                                                  20030117 <--
    JP 2005526714
                        Т
                               20050908
                                          JP 2003-562090
                                                                  20030117 <--
                        A1
    US 20040106616
                                         US 2003-347210
                               20040603
                                                                  20030121 <--
    US 7074799
                        B2
                               20060711
    IN 2004DN01958
                         A
                               20050401
                                          IN 2004-DN1958
                                                                  20040708 <--
    MX 2004006882
                                         MX 2004-6882
                         A
                              20041206
                                                                  20040715 <--
    ZA 2004005641
                        A
                              20050715
                                          ZA 2004-5641
                                                                  20040715 <--
                              20040924
    NO 2004003411
                        A
                                          NO 2004-3411
                                                                  20040816 <--
    US 20060173003
                        A1
                        A1 20060803
B2 20071204
                                          US 2006-345926
                                                                  20060201 <--
    US 7304059
    US 20080015183
                        A1 20080117
                                           US 2007-864987
                                                                  20070929 <--
                                                            P 20020117 <--
P 20020122 <--
PRIORITY APPLN. INFO.:
                                           US 2002-349920P
                                           US 2002-350527P
                                           WO 2003-US1563
                                                             W 20030117 <--
                                           US 2003-347210 A3 20030121 <--
US 2006-345926 A3 20060201
                       MARPAT 139:149640
```

OTHER SOURCE(S):

MAKEMI 139.14904

AB Substituted quinazolin-4-vlamine analogs (shown as I; variables defined below; e.g. (4-trifluoromethylphenyl)[7-(2trifluoromethylphenyl)quinazolin-4-yl]amine) are provided. Such compds. are ligands that may be used to modulate VR1 capsaicin receptor activity in vivo or in vitro (no data), and are particularly useful in the treatment of conditions associated with pathol. receptor activation in humans, domesticated companion animals and livestock animals. Pharmaceutical compns. and methods for using them to treat such disorders are provided, as are methods for using such ligands for receptor localization studies. For I; V, X, W, Y and Z are each independently N or CR1, with the proviso that at least one of V and X is N; U is N or CR2, with the proviso that if V and X are N, then U is CR2; R1 = H, halogen, hydroxy, amino, C1-C8 alkyl, haloC1-C8alkyl, C1-C8alkoxy, haloC1-C8alkoxy and mono- and di(C1-C8alkyl)amino. R2 = (i) H, halogen, cyano, or -C00H; (ii) C1-C8alkanoy1, C2-C8alkanone, or C1-C8carbamate, each of which is

(un) substituted with 1-9 substituents = Rb, or (iii) -Rc-M-A-Ry, wherein: Rc is C0-C3alkyl; M is a bond, N(Rz), O, S, SO2, (C:O)pN(Rz), N(Rz)(C:O)p, SO2N(Rz), or N(Rz)SO2, wherein p is 0 or 1; A is a bond or C1-C8alkyl, (un) substituted with 1-3 Rb. Ry and Rz, if present, are: (a) independently H, C1-C8alkyl, C2-C8alkenyl, C2-C8alkynyl, C6-C10arylC1-C8alkyl, C2-C8alkyl ether, C1-C8alkoxy, a 4- to 10-membered carbocycle or heterocycle, or joined to R1 to form a 4- to 10-membered carbocycle or heterocycle, wherein each Ry and Rz = (un)substituted with 1-9 Rb; or (b) joined to form a 4- to 10-membered carbocycle or heterocycle that is (un)substituted with 1-9 Rb; Ar2 is a 5- to 7-membered aromatic heterocycle, (un) substituted with 1-3 LRa. Arl is a 5- to 10-membered aromatic carbocycle or heterocycle, (un)substituted with 1-3 LRa; L = bond, -O-, -C(O)-, -OC(O)-, -C(O)O-, -O-C(O)O-, -S(O)m-, -NRx-,-C(O)NHRx-, -NHRxC(O)-, -NRxS(O)m-, -S(O)mNRx- and -N[S(O)mRx]S(O)m-; wherein m = 0, 1 and 2; and Rx = H and C1-C8alkyl; Ra = (i) H, halogen, cyano and nitro; and (ii) C1-C8alkyl, C2-C8alkenyl, C2-C8alkynyl, C2-C8alkyl ether, 3- to 10-membered heterocycles, mono- and di(C1-C8alkyl)amino and (3- to 10-membered heterocycle)C1-C6 alkyl, each of which is (un) substituted with 1-9 Rb. Rb = hydroxy, halogen, amino, aminocarbonyl, amido, cyano, nitro, C1-C8alkyl, C1-C8alkoxy, C1-C8alkvlthio, C1-C8alkvl ether, hydroxyC1-C8alkvl, haloC1-C8alkvl, Ph, phenyl(C1-C8alkyl), mono and di(C1-C6 alkyl)amino, (SO2)C1-C8alkyl, 5- to 7-membered heterocycle and (5- to 7-membered heterocycle)(C1-C8alkyl). Although the methods of preparation are not claimed, many example prepns. and characterization data for >500 examples of I are included.

IT 573686-39-2P, [2-Pyridin-4-yl-7-(3-trifluoromethylpyridin-2-yl)quinazolin-4-yl](4-trifluoromethylphenyl)amine
RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); PAC
(Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP
(Preparation); USES (USES)

(Grup candidate and receptor detector; preparation of substituted quinazolin-4-ylamine analogs as VR1 capsaicin receptor antagonists for relieving pain and for detecting receptors) 573886-39-2 CAPLUS

4-Quinazolinamine, 2-(4-pyridinyl)-N-[4-(trifluoromethyl)phenyl]-7-[3-(trifluoromethyl)-2-pyridinyl]- (CA INDEX NAME)

REFERENCE COUNT:

RN

CN

5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2002:845560 CAPLUS DOCUMENT NUMBER: 137:353051

TITLE:

Preparation of quinazolines as TGF-β and/or

p38-α kinase inhibitors INVENTOR(S):

Chakravarty, Sarvajit; Dugar, Sundeep; Perumattam,

John J.; Schreiner, George F.; Liu, David Y.; Lewicki, John A.

PATENT ASSIGNEE(S): Scios, Inc., USA

SOURCE: U.S., 37 pp., Cont.-in-part of U.S. 6,184,226.

CODEN: USXXAM DOCUMENT TYPE: Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:				
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6476031 US 6184226 CN 1152867 AT 342256 ES 2274642 US 6277989 US 20030069248 US 20020161010 US 6903096 US 20050171123	B1 B1 C T T3 B1 A1 A1 B2 A1	20021105 20010206 20040609 20061115 20070516 20010821 20030410 20021031 20050607 20050804	US 1999-383825 US 1998-141916 CN 1999-811659 AT 1999-949568 US 2000-525034 US 2001-96936 US 2001-972582 US 2005-53121	1999827 < 19980828 19990827 < 19990827 < 19990827 < 2000314 < 20011002 < 20011005 <
US 7345045 US 20050220784 PRIORITY APPLN. INFO.: OTHER SOURCE(S): GI	B2 A1 MARPAT	20080318 20051006 137:353051	US 1999-383825 F US 2001-969936 E	20050523 < 12 19980828 < 13 19990827 < 14 20011002 < 15 20011005 <

Title compds. I [R3 = (un)substituted aromatic; Ar = (un)substituted monocyclic or polycyclic aromatic; L = S(CR22)m, NR1SO2(CR22)1, SO2(CR22)m, etc.; Z = CR2, N with the provisos that no more than two Z positions in ring A are N and wherein two adjacent Z positions in ring A cannot be N; R2 = H, alkyl, alkenyl, etc.; 1 = 0-3; m = 0-4; n = 1] and their pharmaceutically acceptable salts were prepared For example, condensation of chloroquinazoline II and 4-aminopyridine afforded claimed quinazoline III. In p38- α kinase inhibition studies, 9-examples of compds. I

exhibited ICSO values in the range of 0.1-1.5 μM . Also, the specificity of compds. I for p38- α was assessed by the ability to inhibit other kinases, e.g., p38- γ NMKI, PKA, PKC, PK(PKD), cck2 and EGE-R, with ICSO values ranging from 4.2 - >500 μM . Compds. I are useful anti-inflammatory agents and in the treatment of fibroproliferative dineases.

T 157862-99-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of quinazolines as TGF- β and/or p38- α kinase inhibitors)

RN 157862-99-2 CAPLUS

CN 4-Quinazolinamine, N-phenyl-2-(4-pyridinyl)- (CA INDEX NAME)

REFERENCE COUNT: 80 THERE ARE 80 CITED REFERENCES AVAILABLE FOR THIS RECORD, ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:754381 CAPLUS

DOCUMENT NUMBER: 137:279208

TITLE: Preparation of (indazol-5-ylamino)quinazolines as

Rho-kinase inhibitors

Hart, Barry; Boyer, Stephen; Weber, Olaf; Lynch, Mark;

Bankston, Donald

PATENT ASSIGNEE(S): Bayer Corporation, USA SOURCE: PCT Int. Appl., 74 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 2

FAMILY ACC. NUM. COUNT: 2 PATENT INFORMATION:

PAT	TENT :	NO.			KIN	D	DATE			APPL	ICAT	ION I	NO.		D.	ATE		
	2002	0769	76				2002 2002			WO 2	002-	US86	59		2	0020	322	<
wo		AE, CO, GM, LS,	AG, CR, HR, LT,	AL, CU, HU, LU,	AM, CZ, ID, LV,	AT, DE, IL, MA,	AU, DK, IN, MD, SG,	AZ, DM, IS, MG,	DZ, JP, MK,	EC, KE, MN,	EE, KG, MW,	ES, KP, MX,	FI, KR, MZ,	GB, KZ, NO,	GD, LC, NZ,	GE, LK, PH,	GH, LR, PL,	
	RW:	GH, CY,	GM, DE,	DK,	LS, ES,	MW, FI,	ZW MZ, FR, CM,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	
AU US EP	2441 2002 2003 1370 1370	492 2503 0125 553	94		A1		2002 2002 2003 2003 2006	1003 1008 0703 1217			002- 002- 002-	2441 2503 1035	492 94 66		2 2	0020 0020 0020 0020 0020	322 322 322	<

```
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
    JP 2004524350
                        т
                            20040812 JP 2002-576234
                                                                  20020322 <--
    AT 325795
                                          AT 2002-719303
                                                                 20020322 <--
                         т
                               20060615
                        В
    TW 261055
                              20060901
                                          TW 2002-91105591
                                                                 20020322 <--
    ES 2264477
                        T3 20070101
                                          ES 2002-719303
                                                                 20020322 <--
                       A1 20031127
    US 20030220357
                                         US 2002-252369
                                                                 20020924 <--
    CA 2507381
                        A1 20040408
                                         CA 2003-2507381
                                                                 20030924 <--
    WO 2004029045
                       A2 20040408
A3 20040722
                                          WO 2003-US29538
                                                                 20030924 <--
    WO 2004029045
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
            PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
            TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
            KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
            FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
            BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                            20040419
                                         AU 2003-270785 20030924 <--
    AU 2003270785
                         A1
    MX 2003008658
                         Α
                               20050411
                                          MX 2003-8658
                                                                  20030924 <--
                                          EP 2003-752497
    EP 1542992
                         A2
                              20050622
                                                                  20030924 <--
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
    JP 2006508068
                         т
                             20060309
                                         JP 2004-540124
                                                                  20030924 <--
    EP 1953152
                               20080806
                                          EP 2008-103780
                         A1
                                                                  20030924 <--
        R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
            IT, LI, LU, MC, NL, PT, RO, SE, SI, SK, TR, AL, LT, LV, MK
                                                                20040609 <--
    HK 1061030
                        A1 20060908 HK 2004-104115
                        A
                              20051018
    MX 2005003273
                                           MX 2005-3273
                                                                  20050323 <--
    US 20060142313
US 20060142314
                        A1 20060629
A1 20060629
                                          US 2006-354977
                                                                  20060216 <--
                                                                  20060216 <--
                                           US 2006-354978
PRIORITY APPLN. INFO.:
                                           US 2001-277974P
                                                             P 20010323 <--
P 20010829 <--
                                           US 2001-315341P
                                           US 2001-315338P
                                                             P 20010829 <--
                                           US 2002-103565
                                                              B1 20020322 <--
                                           US 2002-103566
                                                             B1 20020322 <--
                                           WO 2002-US8659
                                                              W 20020322 <--
                                           US 2002-252369 A 20020924 <--
EP 2003-752497 A3 20030924 <--
WO 2003-US29538 W 20030924 <--
```

OTHER SOURCE(S): CASREACT 137:279208: MARPAT 137:279208

GI.

AB Title compde. I [Y = N, CR17; X = alky1, alkoxy, thioalkoxy, amido, etc.; p = 0-3; a, c = CR5, NR, a = H, halo, carboxy, cyano, alkoxy, etc.; b = CR5, NR, b = H, halo, carboxy, cyano, alkoxy, etc.; B = (un)substituted up to 3 times in any position by R5; R1,6 = H, alky1, R7-5 = H, alky1, alkeny1; R17 = H, alky1, CN with provisions] were prepared For instance, 2,4-Dichloroquinazoline (preparation given) was reacted with 5-aminoindazole (HF/HZO, KOAc) to give 2 - (N-(H-indazol-5-y1)amino)-4-chloroquinazoline in 92% yield. This was coupled to 2,4-dichlorophenylboronic acid (ethylene glycol di-Me ether, Pd(dpf)Cl2, NaKO3, reflux) to give II. I are rho-kinase inhibitors and are useful for inhibiting tumor growth, treating erectile dysfunction and coronary heart disease.

II 461037-54-7P, 5-Fluoro-N-(1H-indazol-5-yl)-2-(4-pyridinyl)-4quinazolinamine 461037-55-8P 461037-58-82-1P,
N-(1H-Indazol-5-yl)-7-methyl-2-(4-pyridinyl)-4-quinazolinamine
461037-83-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(rho-kinase inhibitor; preparation of (indazol-5-ylamino)quinazolines as Rho-kinase inhibitors)

461037-54-7 CAPLUS

RN

CN 4-Quinazolinamine, 5-fluoro-N-1H-indazol-5-yl-2-(4-pyridinyl)- (CA INDEX NAME)

RN 461037-55-8 CAPLUS
CN 4-Quinazolinamine, 5-fluoro-N-1H-indazol-5-yl-2-(4-pyridinyl)-,
2,2,2-trifluoroacetate (1:3) (CA INDEX NAME)

CM 1

CRN 461037-54-7 CMF C20 H13 F N6

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 461037-82-1 CAPLUS

CN 4-Quinazolinamine, N-1H-indazol-5-yl-7-methyl-2-(4-pyridinyl)- (CA INDEX NAME)

RN 461037-83-2 CAPLUS
CN 4-Quinazolinamine, N-1H-indazol-5-yl-7-methyl-2-(4-pyridinyl)-,
2,2,2-trifluoroacetate (1:3) (CA INDEX NAME)

CM 1

CRN 461037-82-1 CMF C21 H16 N6

CM 2

CRN 76-05-1 CMF C2 H F3 O2

F-C-CO₂H

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2002:158388 CAPLUS

DOCUMENT NUMBER: 136:200203

TITLE: Preparation of 4-aminoquinazolines for use in inhibiting neoplastic cells and related conditions

INVENTOR(S): Pamukcu, Rifat; Piazza, Gary PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 23 pp., Cont. of U.S. Ser. No.

60,444, abandoned. CODEN: USXXCO Patent

English

LANGUAGE: FAMILY ACC. NUM. COUNT: 1

DOCUMENT TYPE:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE -----US 20020025968 US 2001-952769 A1 20020228 20010914 <--PRIORITY APPLN. INFO.: US 1998-60444 B1 19980415 <--

OTHER SOURCE(S):

MARPAT 136:200203

AB Title compds. I [wherein R1 = H or alkyl; Y = alkylene; A = ORa or S(O)pRa; Ra = alkylhydroxy; p = 0-2; Z = single bond, methylene, ethylene, vinylene, or ethynylene; CyB = heterocyclic ring; R3 = H, alkyl, alkoxy, halo, or CF3; R4 = H, alkyl, alkoxy, CO2H, carboxy ester, alkanoylamino, alkylsulfonylamino, alkylthio, alkylsulfinyl, alkylsulfonyl, ethynyl, hydroxymethyl, acetyl, or (un)substituted sulfamoyl, carbamoyl, etc.; m and n = independently 1-2; or pharmaceutically acceptable salts or hydrates thereof] were prepared for inhibiting neoplastic cells and related conditions. For example, amination of 2,4-dichloro-6-(2-triethylsilylethynyl)quinazolin-2,4-dione (preparation given) with 2-methoxyethylamine in CHCl3, followed by addition of imidazole in EtOH

and deprotection using NBu4F, afforded II. I are useful in the treatment of precancerous and cancerous lesions, including malignant melanomas, breast cancer, and colon cancer (no data).

157862-99-2 157863-22-4 1102370-13-7 IT

RL: PRPH (Prophetic)

(Preparation of 4-aminoquinazolines for use in inhibiting neoplastic cells and related conditions)

157862-99-2 CAPLUS

CN 4-Quinazolinamine, N-phenyl-2-(4-pyridinyl)- (CA INDEX NAME)

157863-22-4 CAPLUS RN

Benzoic acid, 3-[[2-(4-pyridinyl)-4-quinazolinyl]amino]- (CA INDEX NAME) CN

RN 1102370-13-7 CAPLUS

CN 4-Ouinazolinamine, N-methyl-N-phenyl-2-(4-pyridinyl)-, hydrochloride (1:2) (CA INDEX NAME)

●2 HC1

L5 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2000:161275 CAPLUS

DOCUMENT NUMBER: 132:194387

TITLE: Preparation of quinazolines as p38-α kinase and

TGF-β inhibitors INVENTOR(S):

Chakravarty, Sarvajit; Dugar, Sundeep; Perumattam,

John J.; Schreiner, George F.; Liu, David Y.; Lewicki, John A.

PATENT ASSIGNEE(S): Scios Inc., USA

SOURCE: PCT Int. Appl., 48 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

											LICAT					ATE		
WO	2000	0124	97		A2		2000	0309			1999-							<
	W:	AE,	AL,	AU,	BA,	BB,	BG,	BR,	CA,	CN	, CR,	CU,	CZ,	EE,	GE,	HU,	IL,	
		IN,	IS,	JP,	KP,	KR,	LC,	LK,	LR,	LT	, LV,	MG,	MK,	MN,	MX,	NO,	NZ,	
		PL,	RO,	SG,	SI,	SK,	TR,	TT,	UA,	US	, UZ,	VN,	ZA,	AM,	AZ,	BY,	KG,	
		KZ,	MD,	RU,	TJ,	TM												
	RW:	GH,	GM,	KE,	LS,	MW,	SD,	SL,	SZ,	UG	, ZW,	AT,	BE,	CH,	CY,	DE,	DK,	
		ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC	, NL,	PT,	SE,	BF,	ΒJ,	CF,	CG,	
											, TD,							
US	6184	226			В1		2001	0206		US :	1998-	1419	16		1	9980	828	
											1999-					9990		
AU	9962	413			A		2000	0321		AU :	1999-	6241	3		1	9990	827	<
	7719																	
										EP :	1999-	9495	68		1	9990	827	<
EP	1107																	
	R:									GR	, IT,	LI,	LU,	NL,	SE,	MC,	PT,	
							RO,											
BR	9913	648			A		2002	0102		BR :	1999-	1364	8		1	9990		
JP	2002	5235	02		Т		2002	0730		JP :	2000-	5675	25		1	9990		
CN	1152	867			С		2004	0609		CN :	1999-	8116	59		1	9990		
AT	3422	56			T		2006	1115		AT :	2000- 1999- 1999- 1999-	9495	68		1	9990		
ES	2274	642			Т3		2007	0516		ES :	1999-	9495	68		1	9990		
											2001-					0010		
	1035				A1		2007	0601			2001-					0010		
IORIT	Y APP	LN.	INFO	. :							1998-							
										WO :	1999-	US19	846		W 1	9990	827	<
HER S	OURCE	(S):			MARI	PAT	132:	1943:	B./									

AB Title compde. $[I; R = \mathbb{Z}R1; R1 = (un)substituted cyclic (hetero)aliphatic group, -(hetero)aryl; R3 = noninterfering substituent (sic); R4R5 = atoms to complete a 6-membered aromatic ring containing 0, 1, or 2 nonadjacent N atoms$

and noninterfering substituent(s) (sic); z = bond or linker (sic); z = CR2 or N; RZ = noninterfering substituent (sic)] were prepared Thus, prepn of, e.g., <math>4-(4-pyridinylamino)-2-phenylquinazoline was described. Data for biol. activity of I were given.

157862-99-2

RL: PRPH (Prophetic)

(Preparation of quinazolines as $p38-\alpha$ kinase and TGF- β inhibitors)

N 157862-99-2 CAPLUS

CN 4-Quinazolinamine, N-phenyl-2-(4-pyridinyl)- (CA INDEX NAME)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1995:795361 CAPLUS

DOCUMENT NUMBER: 124:29779

ORIGINAL REFERENCE NO.: 124:5715a,5718a

TITLE: 4-Aminoquinazoline derivatives as inhibitors of cGMP phosphodiesterase and TXA2 synthetase

INVENTOR(S): Lee, Sung J.; Konishi, Yoshitaka; Macina, Orest T.;

Kondo, Kigen; Yu, Dingwei T.

PATENT ASSIGNEE(S): Ono Pharmaceutical Co., Ltd., Japan

SOURCE: U.S., 42 pp. Cont.-in-part of U.S. Ser. No. 76,431,

abandoned. CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3 PATENT INFORMATION:

GI

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5439895	A	19950808	US 1993-154691	19931119 <
JP 06192235	A	19940712	JP 1993-197039	19930714 <
CA 2100626	A1	19940116	CA 1993-2100626	19930715 <
KR 191416	B1	19990615	KR 1993-13549	19930715 <
AT 208771	T	20011115	AT 1993-305557	19930715 <
ES 2167325 JP 08099962	T3 A	20020516 19960416	ES 1993-305557 JP 1995-264667	19930715 <
JP 2923742	B2	19990416	JP 1995-26466/	19950920 <
PRIORITY APPLN. INFO.:				2 19920715 <
OTHER SOURCE(S):	MADDAT	124:29779	US 1993-76431 B	2 19930614 <
OINER SOURCE(S):	PIARPAI	124:29//9		

AB The compds. of the formula I and acid addition salts thereof, salts thereof, and hydrates thereof wherein Rl is hydrogen or C1-4 alkyl; Y is C1-6 alkylene; A is ORO or S(0)pRO, in which RO is C1-4 alkyl-hydroxy; p is 0-2; Z is single bond, methylene, ethylene, vinylene or ethynylene; CyB is (1) 7-membered, unsatd. or partially saturated, monocyclic hetero ring containing

II

as hetero atoms, one, two or three nitrogen atoms, (2) 6-membered, unsatd.
or partially saturated, monocyclic hetero ring containing as hetero atoms, two

or
three nitrogen atoms, (3) 6-membered, unsatd. or partially saturated,
monocyclic hetero ring containing as hetero atom, one nitrogen atom, (4) 4- or
5-membered, unsatd. or partially saturated, monocyclic hetero ring containing

hetero atoms, one, two or three nitrogen atoms, or (5) 4-7 membered, unsatd. or partially saturated, monocyclic hetero ring containing as hetero atoms,

one or two oxygen atoms, or one or two sulfur atoms; R3 = e.g., H, C1-4 alkyl, C1-4 alkoxy; R4 = e.g., H, C1-4 alkyl, C1-4 alkoxy; and m and n independently are 1 or 2; with the proviso that (1) a CyB ring does not bond to Z through a nitrogen atom in the CyB ring when Z is vinylene or ethynylene, have inhibitory effect on cGMP-PDE, and addnl. on TXA2 synthetase. Thus, e.g., 2-(1-imidazolyl)-4-[2-(2-hydroxyethoxy)ethyl]amino-6-ethynylquinazoline.2HC1 (III.2HC1) (prepared by desilylation of a silylacetylene precursor) exhibited inhibitory effect on cGMP-PDE and TXA2 synthetase with IC50 = 4.6 + 10-8 M and 1.33 + 10-6 M, resp. Pharmaceutical formulations were given.

IT 157862-99-2P 157863-22-4P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)

(4-aminoquinazoline derivs. as inhibitors of cGMP phosphodiesterase and TXA2 synthetase)

RN 157862-99-2 CAPLUS

CN 4-Quinazolinamine, N-phenyl-2-(4-pyridinyl)- (CA INDEX NAME)

157863-22-4 CAPLUS

CN Benzoic acid, 3-[[2-(4-pyridinyl)-4-quinazolinyl]amino]- (CA INDEX NAME)

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2009 ACS on STN

1995:761961 CAPLUS ACCESSION NUMBER: DOCUMENT NUMBER: 123:340173

ORIGINAL REFERENCE NO.: 123:61059a,61062a

TITLE: 4-Aminoquinazoline derivatives as inhibitors of cyclic guanosine 3',5'-monophosphate phosphodiesterase and

thromboxane A2 synthetase

INVENTOR(S): Lee, Sung J.; Konishi, Yoshitaka; Macina, Orest T.;

Kondo, Kigen; Yu, Dingwei T.

PATENT ASSIGNEE(S): Ono Pharmaceutical Co., Ltd., Japan

SOURCE: U.S., 44 pp. Cont.-in-part of U.S. Ser. No. 76,431, abandoned.

CODEN: USXXAM

DOCUMENT TYPE: Patent

English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

LANGUAGE:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE	
US 5436233	A	19950725	US 1993-154518		19931119 <	
JP 06192235	A	19940712	JP 1993-197039		19930714 <	
CA 2100626	A1	19940116	CA 1993-2100626		19930715 <	
KR 191416	B1	19990615	KR 1993-13549		19930715 <	
AT 208771	T	20011115	AT 1993-305557		19930715 <	
ES 2167325	Т3	20020516	ES 1993-305557		19930715 <	
JP 08099962	A	19960416	JP 1995-264667		19950920 <	
JP 2923742	B2	19990726				
PRIORITY APPLN. INFO.:			US 1992-913473	B2	19920715 <	
			US 1993-76431	B2	19930614 <	
OTHER SOURCE(S):	CASRE	ACT 123:3401	73: MARPAT 123:34017.	3		

R SOURCE(S): CASREACT 123:340173; MARPAT 123:340173

GI

AB Title compds. I (RI is H, C1-4 alkyl; Y is a single bond or C1-6 alkylene; A is (i) CyA-(R2)l, (ii) OR0 or S(O)pR0 in which R0 is R0A or R0B; R0B, R0 is CyA-(R2)l; R0B is H or C1-4 alkyl; p is 0-2; CyA is, e.g., (1) 3-7 membered, saturated or unsatd., monocyclic carbocyclic ring, (2) 7-membered, unsatd. or partially saturated, monocyclic heter ring containing as hetero

atoms,

one nitrogen atom, one nitrogen and one oxygen atoms, two nitrogen and one oxygen atoms, or one nitrogen and two oxygen atoms, (3) 6-membered, unsatd. or partially saturated, monocyclic hetero ring containing as hetero

atoms,

One nitrogen and one oxygen atoms, two nitrogen and one oxygen atoms, or one nitrogen and two oxygen atoms; R2 is R2A or R2B; R2A is, e.g., CF3, OCF3, R2B is, e.g., H, Cl-4 alkyl, Cl-4 alkoxy; Z is ZA or ZB, ZA is methylene, ethylene, vinylene, ethynylene; ZB is a single bond; CyB is, e.g., (1) "-membered, unsatd or partially saturated, monocyclic hetero ring containing as hetero atoms, one, two or three nitrogen atoms, (2) 6-membered, unsatd. or partially saturated, monocyclic hetero ring containing as hetero

atoms,

RN

two or three nitrogen atoms, (3) 6-membered, unsatd. or partially saturated, monocyclic hetero ring containing as a hetero atom, one nitrogen atom; R3 = e.g., H, C1-4 alkyl; R4 = e.g., NHSO2R11, R11 = e.g., C1-4 alkyl; 1, m, n are independently 1 or 2 (with provisos)] are provided as inhibitors of cGMP-PDE and TXA2 synthetase. Thus, e.g., treatment of 2-(1-imidazoly1)-4-(2-methoxyethy1)amino-6-(2-triethy1silylethyny1)quinazoline (preparation given) with tetrabutylammonium fluoride afforded 6-ethyny1-4-(2-methoxyethy1)amino-2-(1-imidazoly1)quinazoline (II); II.2HCl demonstrated inhibition of cGMP-PDE with and TXA2 synthetase with 1C50 = 4.6 + 10-8 and 2.4 + 10-6

M, resp. Pharmaceutical formulations were given. IT 157862-99-2P 157863-22-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (4-aminoquinazolime derivs. as inhibitors of cyclic quanosine

3',5'-monophosphate phosphodiesterase and thromboxane A2 synthetase)

CN 4-Quinazolinamine, N-phenyl-2-(4-pyridinyl)- (CA INDEX NAME)

- RN 157863-22-4 CAPLUS
- CN Benzoic acid, 3-[[2-(4-pyridinyl)-4-quinazolinyl]amino]- (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

25 L5 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1994:605373 CAPLUS

DOCUMENT NUMBER: 121:205373

ORIGINAL REFERENCE NO.: 121:37397a,37400a TITLE:

4-aminoquinazoline derivatives, and their use as medicine

INVENTOR(S): Lee, Sung Jai; Konishi, Yoshitaka; Macina, Orest Taras; Kondo, Kigen; Yu, Dingwei Tim

PATENT ASSIGNEE(S): Ono Pharmaceutical Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 86 pp. CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 579496	A1	19940119	EP 1993-305557	19930715 <
EP 579496	B1	20011114		
R: AT, BE, CH,	DE, DK	, ES, FR, GB	, GR, IE, IT, LI, LU	, MC, NL, PT, SE
JP 06192235	A	19940712	JP 1993-197039	19930714 <
CA 2100626	A1	19940116	CA 1993-2100626	19930715 <
KR 191416	B1	19990615	KR 1993-13549	19930715 <
AT 208771	T	20011115	AT 1993-305557	19930715 <
ES 2167325	Т3	20020516	ES 1993-305557	19930715 <
JP 08099962	A	19960416	JP 1995-264667	19950920 <
JP 2923742	B2	19990726		
PRIORITY APPLN. INFO.:			US 1992-913473	A 19920715 <
			US 1993-76431	A 19930614 <
OTHER SOURCE(S): GI	MARPAT	121:205373		

- The title compds. I wherein R1 is H or alkyl; Y is bond or alkylene; A is AB (i) -CyAR2, (ii) -OR0 or -S(O)pR0, R0 = H, alkyl, etc., p is 0-2, (iii) -NR16R17, R16, R17 are H, alkyl; CyA is (1) a 3-7 membered monocyclic carbocyclic ring, (2) a 4-7 membered monocyclic hetero ring containing as hetero atoms, one N atom, one N and one O atoms, two N and one O atoms, or one N and two O atoms, (3) a 4-7 membered monocyclic hetero ring containing as hetero atoms, 1 or 2 0 or S atoms, R2 is (1) H, (2) alkvl, (3) alkoxv, (4) -COOR5, in which R5 is H or alkvl, (5) -NR6R7, R6, R7 are H, alkvl, (6) -SO2NR6R7, (7) halogen, (8) CF3, (9) NO2 or (10) CF30; Z is bond, methylene, ethylene, vinylene or ethynylene; CyB is a heterocyclic ring; R3 is H, alkyl, alkoxy, halogen or CF3; R4 is H, alkyl, alkoxy, etc., and acid addition salts thereof, salts thereof, and hydrates thereof were prepared and have inhibitory effect on cGMP-PDE, or addnl. on TXA2 synthetase. Thus, a representative prepared compound II had inhibitory activity IC50 of 3.6 x 10-7 on cGMP-PDE.
- RN 157862-99-2 CAPLUS
- CN 4-Quinazolinamine, N-phenyl-2-(4-pyridinyl)- (CA INDEX NAME)

- RN 157863-22-4 CAPLUS
- CN Benzoic acid, 3-[[2-(4-pyridinyl)-4-quinazolinyl]amino]- (CA INDEX NAME)

=> fil stnguide SINCE FILE COST IN U.S. DOLLARS TOTAL ENTRY SESSION FULL ESTIMATED COST 84.62 273.12 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL. ENTRY SESSION CA SUBSCRIBER PRICE -9.84 -9.84

FILE 'STNGUIDE' ENTERED AT 17:42:47 ON 24 APR 2009 USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Apr 17, 2009 (20090417/UP).

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

=>

=> fil reg COST IN U.S. DOLLARS FULL ESTIMATED COST

SINCE FILE ENTRY 3.15

TOTAL SESSION 276.27

CA SUBSCRIBER PRICE

SINCE FILE ENTRY 0.00

TOTAL SESSION -9.84

CA SUBSCRIBER PRICE

FILE 'REGISTRY' ENTERED AT 18:09:40 ON 24 APR 2009 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2009 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 23 APR 2009 HIGHEST RN 1138395-00-2 DICTIONARY FILE UPDATES: 23 APR 2009 HIGHEST RN 1138395-00-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2009.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>

Uploading C:\Program Files\STNEXP\Oueries\10552426secondnarrowest.str





```
chain nodes :
19
ring nodes :
1 2 3 4 5 6 7 8 9 10 12 13 14 15 16 17
ring/chain nodes :
18
chain bonds :
7-18 9-12 18-19
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 12-13 12-17 13-14 14-15
15-16 16-17
exact/norm bonds :
7-18 18-19
exact bonds :
9-12
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 12-13 12-17 13-14 14-15
15-16 16-17
isolated ring systems :
containing 1 : 12 :
```

G1:Hy,Ak

Match level: 1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:CLASS 19:Atom

L7 STRUCTURE UPLOADED

=> d 17 L7 HAS NO ANSWERS L7 STR

G1 Hy,Ak

Structure attributes must be viewed using STN Express query preparation.

=> s 17

SAMPLE SEARCH INITIATED 18:10:21 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 60 TO ITERATE

100.0% PROCESSED 60 ITERATIONS SEARCH TIME: 00.00.01 5 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 736 TO 1664

PROJECTED ITERATIONS: 736 TO 1664 PROJECTED ANSWERS: 5 TO 234

L8 5 SEA SSS SAM L7

=> s 17 sss full FULL SEARCH INITIATED 18:10:36 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 1114 TO ITERATE

100.0% PROCESSED 1114 ITERATIONS 141 ANSWERS SEARCH TIME: 00.00.01

L9 141 SEA SSS FUL L7

=> d scan

L9 141 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN

IN 4-Quinazolinamine, N-[2-(2,6-dimethyl-4-morpholinyl)-2-methylpropyl]-2-(4-pyridinyl)-

MF C23 H29 N5 O

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):5

L9 141 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN

IN 4-Quinazolinamine, N,2-di-4-pyridinyl-

MF C18 H13 N5

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L9 141 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
- IN 4-Quinazolinamine, N-[(2-methoxy-4-pyridinyl)methyl]-2-(4-pyridinyl)-
- MF C20 H17 N5 O

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L9 141 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
- IN Ethanol, 2-[(phenylmethyl)[2-(4-pyridinyl)-4-quinazolinyl]amino]-
- MF C22 H20 N4 O

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L9 141 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
- IN INDEX NAME NOT YET ASSIGNED
- MF C21 H20 N8

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L9 141 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
- IN Acetamide, 2-[ethyl[2-(4-pyridinyl)-4-quinazolinyl]amino]-N-(4-methoxyphenyl)-
- MF C24 H23 N5 O2

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> fil cap COST IN U.S. DOLLARS TOTAL SINCE FILE ENTRY SESSION FULL ESTIMATED COST 186.36 462.63 DISCOUNT AMOUNTS (FOR OUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION CA SUBSCRIBER PRICE 0.00 -9.84

FILE 'CAPLUS' ENTERED AT 18:11:02 ON 24 APR 2009
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 24 Apr 2009 VOL 150 ISS 18 FILE LAST UPDATED: 23 Apr 2009 (20090423/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d his

(FILE 'HOME' ENTERED AT 17:35:01 ON 24 APR 2009)

FILE 'REGISTRY' ENTERED AT 17:35:21 ON 24 APR 2009

L1 STRUCTURE UPLOADED

L2 3 S L1 L3 59 S L1 SSS FULL

FILE 'CAPLUS' ENTERED AT 17:38:43 ON 24 APR 2009

L4 15 S L3

L5 12 S L4 AND (PRY<2004) L6 0 S 1-12 IBIB ABS HITSTR

L6 U S I-IZ IBIB ABS HITSTR

FILE 'STNGUIDE' ENTERED AT 17:42:47 ON 24 APR 2009

FILE 'REGISTRY' ENTERED AT 18:09:40 ON 24 APR 2009

L7 STRUCTURE UPLOADED L8 5 S L7

L9 5 5 L7 L9 141 S L7 SSS FULL

FILE 'CAPLUS' ENTERED AT 18:11:02 ON 24 APR 2009

=> s 19 and (pry<2004)

25 L9

4270617 PRY<2004 L10 21 L9 AND (PRY<2004)

=> d 1-21 ibib abs hitstr

L10 ANSWER 1 OF 21 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:902403 CAPLUS

DOCUMENT NUMBER: 141:374752

TITLE: Heterocyclic compound modulators of kinases,

particularly Tie-2 kinase, and use in the treatment of kinase-dependent diseases

INVENTOR(S): Ibrahim, Mohamed; Leahy, James; Sangalang, Joan C.;

Schnepp, Kevin; Shi, Xian; Nuss, John

PATENT ASSIGNEE(S): Exelixis, Inc., USA

SOURCE: PCT Int. Appl., 91 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT I	PATENT NO.				D	DATE		1	APPL	ICAT	ION	NO.		D	ATE	
					-											
WO 2004	0921	96		A2		2004	1028	1	WO 2	004-	US10	858		2	0040	408 <
WO 2004	0921	96		A3		2005	0317									
W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,
	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
	ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,

BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG AU 2004230928 20041028 AU 2004-230928 20040408 <--A1 A1 CA 2004-2520323 CA 2520323 20041028 20040408 <--EP 2004-749893 EP 1610774 A2 20040408 <--R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR

JP 2006-509820

US 2003-461446P

WO 2004-US10858

US 2005-552426

20040408 <--

20051007 <--

P 20030409 <--

A 20040408

OTHER SOURCE(S):

JP 2006523238

US 20070161651

PRIORITY APPLN. INFO.:

MARPAT 141:374752 AB The invention provides compds. for modulating protein kinase enzymic activity for modulating cellular activities such as proliferation, differentiation, programmed cell death, migration and chemoinvasion. Compds. of the invention inhibit, regulate and/or modulate kinases, particularly Tie-2. Methods of using the compds. and pharmaceutical compns. thereof to treat kinase-dependent diseases and conditions are also an aspect of the invention. Preparation of quinazoline compds. of the invention is described.

20061012

20070712

18590-70-0P 781615-22-3P 781615-23-4P 781615-24-5P 781615-25-6P 781615-26-7P 781615-36-9P 781615-37-0P 781615-38-1P 781615-48-3P 781615-55-2P 781615-57-4P 781615-76-7P 781615-77-8P 781615-78-9P 781615-82-5P 781615-83-6P

Т

A1

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(heterocyclic compound modulators of kinases, particularly Tie-2 kinase, and use in treatment of kinase-dependent diseases) RN 18590-70-0 CAPLUS

CN 4-Ouinazolinamine, N-[2-(4-morpholinv1)ethv1]-2-(4-pvridinv1)- (CA INDEX NAME)

RN 781615-22-3 CAPLUS

CN 4-Quinazolinamine, N-(cyclohexylmethyl)-2-(4-pyridinyl)- (CA INDEX NAME)

- RN 781615-23-4 CAPLUS
- Ethanol, 2-[[2-(4-pyridinyl)-4-quinazolinyl]amino]- (CA INDEX NAME) CN

- RN 781615-24-5 CAPLUS
- CN 1-Propanol, 3-[[2-(4-pyridinyl)-4-quinazolinyl]amino]- (CA INDEX NAME)

- 781615-25-6 CAPLUS RN
- CN 4-Quinazolinamine, N-[(4-fluorophenyl)methyl]-2-(4-pyridinyl)- (CA INDEX NAME)

- RN 781615-26-7 CAPLUS
- CN 1,2-Ethanediamine, N1,N1-dimethy1-N2-[2-(4-pyridiny1)-4-quinazoliny1]-(CA INDEX NAME)

NH-CH2-CH2-NMe2

RN 781615-36-9 CAPLUS
CN 1-Piperidinecarboxylic acid, 4-[[2-(4-pyridinyl)-4-quinazolinyl]amino]-,
1,1-dimethylethyl ester (CA INDEX NAME)

- RN 781615-37-0 CAPLUS
- CN 4-Quinazolinamine, 2-(4-pyridiny1)-N-[(2,4,6-trimethoxypheny1)methy1]- (CA INDEX NAME)

RN 781615-38-1 CAPLUS

CN 4-Quinazolinamine, N-4-piperidiny1-2-(4-pyridiny1)- (CA INDEX NAME)

RN 781615-48-3 CAPLUS

CN 4-Quinazolinamine, N-[2-(1-piperaziny1)ethy1]-2-(4-pyridiny1)- (CA INDEX NAME)

RN 781615-55-2 CAPLUS

CN 1,2-Propanediol, 3-[[2-(4-pyridiny1)-4-quinazoliny1]amino]-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 781615-57-4 CAPLUS

CN 1-Propanol, 2-[[2-(4-pyridinyl)-4-quinazolinyl]amino]-, (2R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 781615-76-7 CAPLUS

CN Benzenepropanol, $\beta-[[2-(4-pyridinyl)-4-quinazolinyl]amino]-, (\betaR)- (CA INDEX NAME)$

Absolute stereochemistry.

RN

CN Benzenepropanol, β-[[2-(4-pyridinyl)-4-quinazolinyl]amino]-, (βS)- (CA INDEX NAME)

- RN 781615-78-9 CAPLUS
- CN Ethanol, 2-[(phenylmethyl)[2-(4-pyridinyl)-4-quinazolinyl]amino]- (CA INDEX NAME)

$$\begin{array}{c} N \\ N \\ N \\ \text{CH}_2\text{-CH}_2\text{-OH} \end{array}$$

- RN 781615-82-5 CAPLUS
- CN 1-Piperazineethanol, 4-[[2-(4-pyridinyl)-4-quinazolinyl]amino]- (CA INDEX NAME)

- RN 781615-83-6 CAPLUS
- CN 4-Quinazolinamine, N-1-piperidinyl-2-(4-pyridinyl)- (CA INDEX NAME)

IT 781615-20-1 781615-58-5 781615-66-5 781615-69-8 781615-70-1 781615-71-2

781615-72-3

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)
(heterocyclic compound modulators of kinases, particularly Tie-2 kinase,

and use in treatment of kinase-dependent diseases)

RN 781615-20-1 CAPLUS

CN 4-Quinazolinamine, 2-(4-pyridinyl)-N-[2-(1-pyrrolidinyl)ethyl]- (CA INDEX NAME)

RN 781615-58-5 CAPLUS

CN 2-Propanol, 1-[[2-(4-pyridiny1)-4-quinazoliny1]amino]-, (2S)- (CA INDEX NAME)

RN 781615-66-5 CAPLUS

CN 4-Quinazolinamine, 6,7-dimethoxy-N-(3S)-3-piperidinyl-2-(4-pyridinyl)-(CA INDEX NAME)

Absolute stereochemistry.

RN 781615-69-8 CAPLUS

CN 1-Butanol, 2-[[2-(3-methoxy-4-pyridinyl)-7-methyl-4-quinazolinyl]amino]-3methyl-, (2R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 781615-70-1 CAPLUS

CN 1-Butanol, 2-[[2-(3-methoxy-4-pyridinyl)-7-methyl-4-quinazolinyl]amino]-3methyl-, (2S)- (CA INDEX NAME)

- RN 781615-71-2 CAPLUS
- CN Benzeneethanol, β-[[2-(3-methoxy-4-pyridinyl)-7-methyl-4-quinazolinyl]amino]-, (βS)- (CA INDEX NAME)

Absolute stereochemistry.

- RN 781615-72-3 CAPLUS
- CN Benzeneethanol, β-[[2-(3-methoxy-4-pyridiny1)-7-methy1-4-quinazoliny1]amino]-, (βR)- (CA INDEX NAME)

Absolute stereochemistry.

IT 781615-85-8P 781616-05-5P RL: SPN (Synthetic preparation); PREP (Preparation) (heterocyclic compound modulators of kinases, particularly Tie-2 kinase, and use in treatment of kinase-dependent diseases)

RN 781615-85-8 CAPLUS

CN 1-Piperazinecarboxylic acid, 4-[[2-(4-pyridinyl)-4-quinazolinyl]amino]-, 1,1-dimethylethyl ester (CA INDEX NAME)

781616-05-5 CAPLUS RN CN

4-Quinazolinamine, N-(3S)-3-piperidiny1-2-(4-pyridiny1)- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS 4 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 2 OF 21 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:931342 CAPLUS

DOCUMENT NUMBER: 140:791

TITLE: Treatment of fibroproliferative disorders using

TGF-B inhibitors

INVENTOR(S): Chakravarty, Sarvajit; Dugar, Sundeep; Higgins, Linda S.; Kapoun, Ann M.; Liu, David Y.; Schreiner, George

F.; Protter, Andrew A.; Tran, Thomas-Toan

PATENT ASSIGNEE(S): Scios, Inc., USA

SOURCE: PCT Int. Appl., 114 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PA:	FENT						DATE								D	ATE		
WO	2003	0976			A1		2003	1127			003-				21	0030	 516 <	:
	W:						AU,											
							DK,											
							IN,											
		LS,	LT.	LU,	LV.	MA,	MD,	MG,	MK,	MN.	MW.	MX,	MZ,	NO.	NZ.	OM,	PH,	
		PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	TZ,	
		UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW							
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,	
		KG,	KZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	
		FI,	FR,	GB,	GR,	HU,	IE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,	
		BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG	
ΑU	2003	2293	05		A1		2003	1202		AU 2	003-	2293	05		2	0030	516 <	:
US	2004	0038	856		A1		2004	0226		US 2	003-	4404	28		2	0030	516 <	
EP	1511	738			A1		2005	0309		EP 2	003-	7268	92		2	0030	516 <	:
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK		
RIT	Y APP	LN.	INFO	. :						US 2	002-	3817	20P	1	P 2	0020	517 <	:
										US 2	003-	4404	28	- 2	A 2	0030	516 <	:
										WO 2	003-	US15	514	1	W 2	0030	516 <	:

OTHER SOURCE(S): MARPAT 140:791

The invention concerns methods of treating fibroproliferative disorders associated with TGF- β signaling, by administering non-peptide small molinhibitors of TGF- β specifically binding to the type I TGF- β receptor (TGF β -RI). Preferably, the inhibitors are quinazoline derive. The invention also concerns methods for reversing the effect of TGF- β mediated cell activation on the expression of a gene associated with fibrosis, comprising contacting a cell or tissue in which the expression of such gene is altered as a result of TGF- β mediated cell activation, with a non-peptide small mol. inhibitor of TGF- β , specifically binding a TGF β -RI receptor kinase present in the cell or tissue.

r 474289-44-6

PRI

- RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
- (treatment of fibroproliferative disorders using TGF- β inhibitors)
- RN 474289-44-6 CAPLUS
- CN 4-Ouinazolinamine, N, 2-di-4-pyridinyl- (CA INDEX NAME)

REFERENCE COUNT:

4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 3 OF 21 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2003:472388 CAPLUS

DOCUMENT NUMBER: 139:53030

TITLE: Pyrimidine-based and quinazoline-based compounds

useful as GSK-3 inhibitors

INVENTOR(S): Choquette, Deborah; Davies, Robert J.; Wannamaker,

Marion W.

PATENT ASSIGNEE(S): Vertex Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 102 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: Facent English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

	TENT												NO.			ATE		
	2003															0021	209	<
	W:	AE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
		co,	CR.	CU,	CZ,	DE.	DK,	DM,	DZ,	EC.	EE.	ES.	FI,	GB,	GD,	GE.	GH,	
		GM,	HR.	HU,	ID,	IL,	IN,	IS,	JP,	KE.	KG,	KP.	KR.	KZ,	LC,	LK,	LR,	
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,	
							SE,											
		UG,	US,	UZ,	VN,	YU,	ZA,	ZM,	ZW									
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,	
		KG,	KZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	
		FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	SI,	SK,	TR,	BF,	BJ,	
		CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG			
CA	2469	316			A1		2003	0619		CA 2	002-	2469	316		2	0021	209	<
AU	2002	3645	36		A1		2003	0623		AU 2	002-	3645	36		2	0021	209	<
AU	2002	3645	36		B2		2008	1023										
US	2003	0199	526		A1		2003	1023		US 2	002-	3149	05		2	0021	209	<
EP	1474	147			A1		2004	1110		EP 2	002-	7999	13		2	0021	209	<
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	SK			
JP	2005	5160	05		T		2005	0602		JP 2	003-	5507	88		2	0021	209	<
MX	2004	0055	10		A		2006	0224		MX 2	004-	5510			2	0040	607	<
ZA	2004	0053	80		A		2005	0617		ZA 2	004-	5380			2	0040	706	<
ORIT	APP	LN.	INFO	. :						US 2	001-	3388	57P		P 2	0011	207	<
										WO 2	002-	US39	190		W 2	0021	209	<
ER S	DURCE	(S):			MAR	PAT	139:	5303)									

B The invention provides a compound of formula I or a pharmaceutically acceptable derivative thereof [wherein: Rl = (un)substituted 5- to 6-membered monocyclic or 8- to 10-membered bicyclic (hetero)aryl with 0-4 N/O/S atom(8); Q = (un)substituted C1-4 alkylene chain with 0-2 non-adjacent CH2 optionally replaced by SO2 or CO; R2 = certain (un)substituted Ph, thienyl, pyridinyl, pyrimidinyl, pyridainyl, pyrimidinyl, pyridainyl, pyrimidinyl, or RaRb = atoms to complete fused,

partially saturated or aromatic, 5- to 8-membered ring with 0-3 N/O/S atom(s)

and

optionally substituted by oxo, -T-R3, etc.; T = bond or C1-4 alkylene chain, R3 = H, halo, OH or derivs., NH2 or derivs., CN, SH or derivs., CHO or derivs., CO2H or derivs., etc.; including pharmaceutically acceptable derives, and prodrugs]. The compds. are inhibitors of protein kinases, particularly GSK-3 (glycogen synthase kinase 3) mammalian protein kinases, particularly GSK-3 (glycogen synthase kinase 3) mammalian protein kinases. The invention also provides pharmaceutically acceptable compns. comprising the compds of the invention, and methods of utilizing the compds. and compns. in the treatment of various protein kinases—mediated disorders, such as diabetes, cancer, stroke, and Alzheimer's disease. A table of over 200 compds. I is given in claims. Prepns. of 37 compds are described in detail. For instance, described in detail. For instance, the composition of the comp

4-cnito-2-12-firitorometrypheny/figurazorine was thermally condensed with 6-(2-aminoethylamino)nicotinonitrile (neat, approx. 140°) to give 49% title compound II. In a test for inhibition of GSK-3 β in vitro, 17 compds. I, including II, had Ki < 0.1 μ M, and 16 compds. had Ki of 0.1 to 1.0 μ M.

IT 544676-80-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of pyrimidine-based compds. useful as GSK-3 inhibitors)

RN 544676-80-4 CAPLUS

3-Pyridinecarbonitrile, 6-[[2-[(2-(4-pyridiny1)-4-quinazoliny1]amino]ethy1]amino]- (CA INDEX NAME)

REFERENCE COUNT:

11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 4 OF 21 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2002:849586 CAPLUS

DOCUMENT NUMBER: TITLE: 137:370099

Preparation of 3-aminopyrazolo[3,4-c]pyridazines as inhibitors of glycogen synthase kinase-3 and crystal structures of gsk-3 β protein and protein

complexes

Ter Haar, Ernst; Swenson, Lovorka; Green, Jeremy;

INVENTOR(S):

Arnost, Michael J.

PATENT ASSIGNEE(S): Vertex Pharmaceuticals Incorporated, USA SOURCE: PCT Int. Appl., 778 pp.

PCT Int. Appl., 778 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	TENT						DATE				ICAT					ATE		
WO	2002	0880	78		A2		2002	1107			002-							<
	W:	AE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
		CO,	CR,	CU,	CZ,	DE,	DK,	DM.	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,	
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,	
		PL,	PT.	RO,	RU,	SD,	SE.	SG,	SI,	SK,	SL,	TJ,	TM.	TN.	TR.	TT,	TZ,	
		UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZM,	ZW								
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,	
		KG,	KZ,	MD,	RU,	TJ,	TM,	AT,	BE,	CH,	CY,	DE,	DK,	ES,	FI,	FR,	GB,	
		GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	
		GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG								
	2444				A1		2002	1107		CA 2	2002-	2444	882		2	0020	429	<
AU	2002	2590	71		A1		2002	1111		AU 2	2002-	2590	71		2	0020	429	<
US	2003	0125	332		A1		2003	0703		US 2	2002-	1352	55		2	0020	429	<
US	7390	808			B2		2008	0624										
EP	1435	957			A2		2004	0714		EP 2	2002-	7290	56		2	0020	429	<
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR							
JP	2005	5047	31		T		2005	0217		JP 2	2002-	5853	80		2	0020	429	<
							2005	0725		MX 2	2003-	9957			2	0031	030	<
US	2008	0262	205		A1		2008	1023		US 2	-8009	7991	7		2	0080	328	<
ORIT:	Y APP	LN.	INFO	. :						US 2	2001-	2873	66P		P 2	0010	430	<
											2001-					0010		
											2002-							
											2002-					0020		
										WO 2	2002-	US13	511		W 2	0020	429	<
IER S	DURCE	(S):			MAR	PAT	137:	3700	99									

AB Title compds. [I; Rl = H, RCO, ROZC, (substituted) aliphatyl, carbocyclyl, heterocyclyl, heterocyclyl, etc.; R2, R3 = H, (substituted) aliphatyl, carbocyclyl, heterocyclyl, aryl, aralkyl, heteroaryl, heteroaralkyl, NR2, NRCOR, SR, OR, CF3, halo, NO2, cyano, etc.; R = H, (substituted) aliphatyl, carbocyclyl, heterocyclyl, aryl, aralkyl, heteroaryl, heteroaralkyll, were prepared Thus, 3-chloro-4-cyano-5,6-diphenylpyridazine was refluxed with NZH4 in EtOH to give 3-amino-4,5-diphenyl-IH-pyrazolo[3,4-c]pyridazine. The latter inhibited ggk-3 with KisOl, JM.

IT 474381-74-3P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)

(crystal structure determination; preparation of pyrazolopyridazines as inhibitors

of gsk-3 and crystal structures of gsk-3β protein and protein complexes)

474381-74-3 CAPLUS RN

CN Kinase (phosphorylating), glycogen synthetase (human isoenzyme 3β), compd. with N-(5-methyl-1H-pyrazol-3-yl)-2-(4-pyridinyl)-4-quinazolinamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 474231-10-2

CMF Unspecified

CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 404828-10-0 CMF C17 H14 N6

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD, ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 5 OF 21 CAPLUS COPYRIGHT 2009 ACS on STN

John A.

ACCESSION NUMBER: 2002:845560 CAPLUS

DOCUMENT NUMBER: 137:353051

TITLE: Preparation of quinazolines as TGF-β and/or

p38-α kinase inhibitors

INVENTOR(S): Chakravarty, Sarvajit; Dugar, Sundeep; Perumattam,

John J.; Schreiner, George F.; Liu, David Y.; Lewicki,

PATENT ASSIGNEE(S):

Scios, Inc., USA U.S., 37 pp., Cont.-in-part of U.S. 6,184,226. SOURCE:

CODEN: USXXAM DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6476031	B1	20021105	US 1999-383825	19990827 <

US 6184226	B1	20010206	US	1998-141916		19980828
CN 1152867	С	20040609	CN	1999-811659		19990827 <
AT 342256	T	20061115	AT	1999-949568		19990827 <
ES 2274642	Т3	20070516	ES	1999-949568		19990827 <
US 6277989	B1	20010821	US	2000-525034		20000314 <
US 20030069248	A1	20030410	US	2001-969936		20011002 <
US 20020161010	A1	20021031	US	2001-972582		20011005 <
US 6903096	B2	20050607				
US 20050171123	A1	20050804	US	2005-53121		20050207 <
US 7345045	B2	20080318				
US 20050220784	A1	20051006	US	2005-136242		20050523 <
PRIORITY APPLN. INFO.:			US	1998-141916	A2	19980828 <
			US	1999-383825	A3	19990827 <
			US	2001-969936	B1	20011002 <
			US	2001-972582	A3	20011005 <

OTHER SOURCE(S): MARPAT 137:353051

GI

- AB Title compds. I [R3 = (un)substituted aromatic; Ar = (un)substituted monocyclic or polycyclic aromatic; L = S(CR22)m, NR1SO2(CR22)1, SO2(CR22)m, etc.; Z = CR2, N with the provisos that no more than two Z positions in ring A are N and wherein two adjacent Z positions in ring A cannot be N; R2 = H, alkyl, alkenyl, etc.; 1 = 0-3; m = 0-4; n = 1] and their pharmaceutically acceptable salts were prepared For example, condensation of chloroquinazoline II and 4-aminopyridine afforded claimed quinazoline III. In p38- α kinase inhibition studies, 9-examples of compds. I exhibited IC50 values in the range of 0.1-1.5 µM. Also, the specificity of compds. I for $p38-\alpha$ was assessed by their ability to inhibit other kinases, e.g., p38-y JNK1, PKA, PKC, PK(PKD), cck2 and EGF-R, with IC50 values ranging from 4.2 - >500 μM. Compds. I are useful anti-inflammatory agents and in the treatment of fibroproliferative diseases. 474289-44-6P
- RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 - (drug candidate; preparation of quinazolines as TGF- β and/or p38- α kinase inhibitors)
- RN 474289-44-6 CAPLUS
- CN 4-Quinazolinamine, N, 2-di-4-pyridinyl- (CA INDEX NAME)

REFERENCE COUNT:

80 THERE ARE 80 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 6 OF 21 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:754381 CAPLUS

DOCUMENT NUMBER: 137:279208

TITLE: Preparation of (indazol-5-ylamino)quinazolines as Rho-kinase inhibitors

INVENTOR(S): Nagarathnam, Dhanapalan; Asgari, Davoud; Shao,

Jianxing; Liu, Xiao-Gao; Khire, Uday; Wang, Chunguang; Hart, Barry; Boyer, Stephen; Weber, Olaf; Lynch, Mark;

Bankston, Donald
PATENT ASSIGNEE(S): Baver Corporation

PATENT ASSIGNEE(S): Bayer Corporation, USA SOURCE: PIX Appl., 74 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PAT	ENT :	NO.			KIN	D	DATE			APPI	LICAT	ION :	NO.		DZ	ATE		
	2002									WO 2	2002-	US86	59		20	0020	322	<
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
											EE,							
											KG,							
											MW,							
								SI,	SK,	SL,	TJ,	TM,	TR,	TT,	TZ,	UA,	UG,	
					YU,													
	RW:										TZ,							
											IT,							
											GW,							
CA	2441	492			A1		2002	1003	-	CA 2	2002-	2441	492		20	0020	322	<
	2002																	
	2003																	
	1370									EP 2	2002-	7193	03		20	0020	322	<
EP	1370																	
	R:										IT,	LI,	LU,	NL,	SE,	MC,	PT,	
		IE,	SI,	LT,	LV,	FΙ,	RO,	MK,	CY,	AL,	TR							
JP	2004 3257 2610	5243	50		Т		2004	0812		JP 2	2002-	5762	34		20	0020		
ΑT	3257	95			T		2006	0615		AT 2	2002-	7193	03		20	0020		
TW	2610	55			В		2006	0901		TW 2	2002-	9110	5591		20	0020		
	2264						2007				2002-					0020		
	2003						2003				2002-					0020		
	2507				A1		2004				2003-					0030		
WO	2004	0290	45		A2		2004	0408		WO 2	5003-	US29	538		20	0030	924	<

```
WO 2004029045
                        A3 20040722
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
            PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
            TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
            KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
            FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
            BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
    AU 2003270785
                        A1
                              20040419
                                         AU 2003-270785
                                                                 20030924 <--
    MX 2003008658
                         Α
                            20050411 MX 2003-8658
20050622 EP 2003-752497
                                                                  20030924 <--
    EP 1542992
                        A2
                                                                 20030924 <--
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
    JP 2006508068
                         T
                             20060309 JP 2004-540124
                                                                 20030924 <--
    EP 1953152
                        A1
                              20080806
                                          EP 2008-103780
                                                                 20030924 <--
        R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
            IT, LI, LU, MC, NL, PT, RO, SE, SI, SK, TR, AL, LT, LV, MK
                               20060908
                                          HK 2004-104115
                        A1
                                                                 20040609 <--
    MX 2005003273
                         A
                               20051018
                                           MX 2005-3273
                                                                  20050323 <--
    US 20060142313
                               20060629
                                           US 2006-354977
                                                                  20060216 <--
                        A1
                            20060629
    US 20060142314
                        A1
                                           US 2006-354978
                                                                  20060216 <--
                                                             P 20010323 <--
P 20010829 <--
P 20010829 <--
PRIORITY APPLN. INFO.:
                                           US 2001-277974P
                                           US 2001-315341P
                                           US 2001-315338P
                                           US 2002-103565
                                                              B1 20020322 <--
                                           US 2002-103566
                                                             B1 20020322 <--
                                           WO 2002-US8659
                                                              W 20020322 <--
                                                              A 20020924 <--
                                           US 2002-252369
                                           EP 2003-752497
                                                             A3 20030924 <--
                                           WO 2003-US29538
                                                             W 20030924 <--
```

OTHER SOURCE(S): CASREACT 137:279208; MARPAT 137:279208

GI

AB Title compds. I [Y = N, CR17; X = alky1, alkoxy, thioalkoxy, amido, etc.; p = 0-3; a, c = CR5, NR, b = CR5, NR, b = H, halo, carboxy, cyano, alkoxy, etc.; b = CR5, NR, b = H, halo, carboxy, cyano, alkoxy, etc.; B = (un)substituted up to 3 times in any position by R5; R1,6 = H, alky1; R2-5 = H, alky1, alkeny1; R17 = H, alky1, CN with provisions] were prepared For instance, 2,4-Dichloroquinazoline (preparation given) was reacted with 5-aminoindazole (IHF/HZO, KOAc) to give 2 - (N-(H-indazol-5-y1)amino)-4-chloroquinazoline in 92% yield. This was coupled to 2,4-dichlorophenylboronic acid (ethylene glycol di-Me ether, Pd(dpf)Cl2, NaRO3, reflux) to give II. I are rho-kinase inhibitors and are useful for inhibiting tumor growth, treating erectile dysfunction and coronary heart disease.

II 461037-54-7P, 5-Fluoro-N-(1H-indazol-5-yl)-2-(4-pyridinyl)-4quinazolinamine 461037-55-8P 461037-58-82-1P,
N-(1H-Indazol-5-yl)-7-methyl-2-(4-pyridinyl)-4-quinazolinamine
461037-83-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(rho-kinase inhibitor; preparation of (indazol-5-ylamino)quinazolines as Rho-kinase inhibitors)

461037-54-7 CAPLUS

RN

CN 4-Quinazolinamine, 5-fluoro-N-1H-indazol-5-yl-2-(4-pyridinyl)- (CA INDEX NAME)

RN 461037-55-8 CAPLUS
CN 4-Quinazolinamine, 5-fluoro-N-1H-indazol-5-yl-2-(4-pyridinyl)-,
2,2,2-trifluoroacetate (1:3) (CA INDEX NAME)

CM 1

CRN 461037-54-7 CMF C20 H13 F N6

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 461037-82-1 CAPLUS

CN 4-Quinazolinamine, N-1H-indazol-5-yl-7-methyl-2-(4-pyridinyl)- (CA INDEX NAME)

RN 461037-83-2 CAPLUS
CN 4-Quinazolinamine, N-1H-indazol-5-yl-7-methyl-2-(4-pyridinyl)-,
2,2,2-trifiuoroacetate (1:3) (CA INDEX NAME)

CM 1

CRN 461037-82-1 CMF C21 H16 N6

CM 2

CRN 76-05-1 CMF C2 H F3 O2

F-C-CO₂H

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 7 OF 21 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:615578 CAPLUS DOCUMENT NUMBER: 137:154942

TITLE: Preparation of novel quinazoline derivatives for preventing or treating inflammatory diseases caused by bacterial DNA

INVENTOR(S): Kisanuki, Sumitsugu; Tomizawa, Hideyuki; Isobe, Yoshiaki

PATENT ASSIGNEE(S): SOURCE: Japan Energy Corp., Japan PCT Int. Appl., 96 pp. CODEN: PIXXD2

Patent

DOCUMENT TYPE: LANGUAGE:

LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002062767	A1	20020815	WO 2002-JP1045	20020207 <
W: AU, CA, JP,	NZ, US			
RW: AT, BE, CH,	CY, DE	DK, ES, FI	, FR, GB, GR, IE,	IT, LU, MC, NL,
PT, SE, TR				
AU 2002230181	A1	20020819	AU 2002-230181	20020207 <
IORITY APPLN. INFO.:			JP 2001-30973	A 20010207 <
			WO 2002-JP1045	W 20020207 <
HER SOURCE(S):	MARPAT	137:154942		

OTHER GI

Disclosed are medicinal compns. for preventing or treating inflammatory AB diseases caused by bacterial DNA which contain as the active ingredient quinazoline derivs. represented by the following general formula (I) or pharmacol. acceptable salts thereof [wherein R5, R6, R7, R8 = H, substituents selected from a group of substituents A; or two adjacent groups of R5-R8 together represent methylenedioxy or CH:CHCH:CH; wherein substituents A = C1-4 alkyl, halo, OH, C1-4 alkoxy, C1-4 acyloxy, NR13R14 (R13, R14 = H, C1-4 alkyl), NHCOR15 (R15 = H, C1-4 alkyl), Ph, PhO, cyano, C1-4 acvl, C02H, C2-5 alkoxycarbonvl, CONH2, N-(C1-4 alkvl)carbamovl, N,N-di(C1-4 alkyl)carbamoyl; R2 = (un)substituted aryl or heteroaryl; n = 0, 1; X = a group of the following general formula -P-NR9R10 or Q; wherein P = (un)branched C2-6 alkylene; R9, R10 = H, C1-4 alkyl, C2-4 hydroxyalkyl, C3-6 alkoxyalkyl; Y = CHR11, O, S, NR12 (wherein R11 = H, C1-4 alkyl, OH, hydroxymethyl, methoxycarbonyl, ethoxycarbonyl; R12 = H, C1-4 alkyl, arvl optionally substituted by substituents A); Z = H or OH when Y = CHR11; Z = H when Y = O, S, or NR12]. Also disclosed are medicinal compns. containing I for preventing or treating autoimmune diseases or diseases caused by excessive production of TNF-a or IL-6. These compds. I inhibit the unusual production of TNF- α or IL-6 of macrophage or monocyte activated by bacterial DNA and are useful for treating or preventing diseases caused by unusual increase in cytokines, e.g. chronic articular rheumatism, systemic lupus erythematosus (SLE), septicemia, inflammatory bowel diseases, osteoarthritis, multiple sclerosis, Behcet's disease, rejection of bone marrow transplant, hepatitis, type II diabetes, atrial myxoma, alc. hepatic cirrhosis, myeloma, and mesangium-proliferative nephritis. Thus, mesylation of 4-(4-hydroxybutylamino)-6,7-dimethoxy-2-(2-naphthyl)quinazoline by methanesulfonyl chloride and Et3N in CH2Cl2 under ice-cooling for 1 h and at room temperature for 4 h followed by amination with N-(2-methoxyethyl)ethylamine at room temperature at room temperature for 2

6,7-dimethoxy-4-(4-(ethyl-(2-methoxyethyl)amino)butylamino)-2-(2naphthyl)quinazoline (II). II in vitro inhibited the production of $TNF-\alpha$ in mouse spleen cells with IC50 of 10 nM and that of IL-6 with IC50 of 32 nM.

445401-96-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(preparation of novel quinazoline derivs, for preventing or treating inflammatory diseases caused by bacterial DNA)

RN 445401-96-7 CAPLUS

CN 1,3-Propanediamine, N3-[6,7-dimethoxy-2-(4-pyridiny1)-4-quinazoliny1]-N1, N1-dimethyl- (CA INDEX NAME)

REFERENCE COUNT: THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT 2002:504782 CAPLUS

L10 ANSWER 8 OF 21 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER:

DOCUMENT NUMBER: 137:78968

TITLE: Preparation of aminocarbonylpyrrolidine derivatives as

dipeptidyl peptidase IV inhibitors

INVENTOR(S): Matsuno, Kenji; Ueno, Kimihisa; Iwata, Yasuhiro; Matsumoto, Yuichi; Nakanishi, Satoshi; Takasaki,

Kotaro; Kusaka, Hideaki; Nomoto, Yuji; Ogawa, Akira

PATENT ASSIGNEE(S): Kyowa Hakko Kogyo Co., Ltd., Japan

SOURCE: PCT Int. Appl., 196 pp.

CODEN: PIXXD2

Patent

DOCUMENT TYPE: LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

F

	PAT	ENT :	NO.			KIN	D	DATE		- 2	APPL	ICAT	ION :	NO.		D	ATE		
							-									-			
	WO	2002	0518	36		A1		2002	0704	1	WO 2	001-	JP11	578		2	0011	227 <-	-
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
			co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KR,	ΚZ,	LC,	LK,	LR,	LS,	
			LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,	PL,	
			PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	
			UG,	US,	UZ,	VN,	YU,	ZA,	ZM,	zw									
		RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AT,	BE,	CH,	
			CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	
			BF,	ΒJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG	
	CA	2433	090			A1		2002	0704		CA 2	001-	2433	090		2	0011	227 <-	-
		2002																227 <-	
	EP	1354	882			A1		2003	1022	1	EP 2	001-	2718	92		2	0011	227 <-	-
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
			IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR							
	US	2004	0180	925		A1		2004	0916	1	US 2	003-	4659	19		2	0031	110 <-	-
PRIOR	RITY	APP	LN.	INFO	.:						JP 2	000-	3984	41	- 2	A 2	0001	227 <-	-

JP 2001-261409 A 20010830 <--WO 2001-JP11578 W 20011227 <--

OTHER SOURCE(S):

MARPAT 137:78968

NHCH2CH2NH, NH(CH2)3NH, NHCH2C(CH3)2NH, 1-(4-mathyl-piperidin-e4-maino)-yl, 1-(1-aminomethylcyclopropyl)amino, 4-NHCH2C6H4CH2NH, N(CH3)CH2CH2N(CH3), 1,4-piperazinyl, 1-piperidinyl-4-amino, N(CH3)CH2C(CH3)2NH; Z = optionally substituted 1-pyrrolidinyl, optionally substituted 3-thiazolidinyl, optionally substituted 1-oxo-3-thiozolidinyl, etc.] and pharmacol. acceptable salts of title compds are prepared as dispetidyl peptidase IV inhibitors. Title compds. are useful as antidiabetics, antiaids agents, antiarteriosclerosis, antihyperqlvcinemia agents, and as remedies for

Title compds. [I; Q = CH2, S; R = H, (S)-CN; B = CH2CO, COCH2, CO; YXW =

TT

antiarterioscierosis, antinyperglycinemia agents, and as remedies for hyperglycinemia, hyperinsulinism, etc. in combination with related remedies as GI-262570, KADI229, etc. Thus, the title compound II was prepared and in vivo tested for DPP-IV inhibition with IC50 = 11 mmol/1.

IT 440099-77-4P

AB

CN

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of aminocarbonylpyrrolidine derivs. as dipeptidyl peptidase IV inhibitors)

RN 440099-77-4 CAPLUS

2-Pyrrolidinecarbonitrile, 1-[2-[[2-(4-pyridiny1)-4-quinazoliny1]amino]ethy1]amino]acety1]-, (2S)-, methanesulfonate (1:2) (CA INDEX NAME)

CM 1

CRN 440099-76-3 CMF C22 H23 N7 O

CM

CRN 75-75-2 C H4 O3 S

380588-03-4P ΙT

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of aminocarbonylpyrrolidine derivs. as dipeptidyl peptidase IV

inhibitors) RN 380588-03-4 CAPLUS

CN 1,2-Ethanediamine, N1-[2-(4-pyridiny1)-4-quinazoliny1]- (CA INDEX NAME)

REFERENCE COUNT:

33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 9 OF 21 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: DOCUMENT NUMBER: TITLE:

2002:220584 CAPLUS 136:247584

Preparation of pyrazolamines and analogs as protein kinase inhibitors for treatment of cancer, diabetes, and Alzheimer's disease

INVENTOR(S): Bebbington, David; Knegtel, Ronald; Golec, Julian M.
C.; Li, Pan; Davies, Robert; Charrier, Jean-Damien

PATENT ASSIGNEE(S): Vertex Pharmaceuticals Incorporated, USA

SOURCE: PCT Int. Appl., 356 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 14 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
W0 2002022608 W: AE, AG, CO, CR, GM, HR, LS, LT, PT, RO,	Al AL, AM, AT CU, CZ, DE HU, ID, IL LU, LV, MA	20020321 , AU, AZ, , DK, DM, , IN, IS, , MD, MG, , SG, SI,	WO 2001-US42152 BA, BB, BG, BR, BY, BZ, DZ, EC, EE, ES, FI, GB, JP, KE, KG, KP, KR, KZ, MK, MN, MW, MX, MZ, NO, SK, SL, TJ, TM, TR, TT,	20010914 < CA, CH, CN, GD, GE, GH, LC, LK, LR, NZ, PH, PL,
DE, DK,	ES, FI, FR	, GB, GR,	SL, SZ, TZ, UG, ZW, AT, IE, IT, LU, MC, NL, PT, GQ, GW, ML, MR, NE, SN, CA 2001-2422380	SE, TR, BF,
AU 2001096871 US 20030055044 US 6638926	A A1 B2	20020326 20030320 20031028	AU 2001-96871 US 2001-953505	20010914 < 20010914 <
US 20030064981 US 6613776 US 20030064982 US 7473691	B2 A1 B2	20030403 20030902 20030403 20090106	US 2001-952836 US 2001-952875	20010914 <
US 20030073687 US 6660731 US 20030078166 US 6696452	A1 B2 A1 B2	20030417 20031209 20030424 20040224	GQ, GW, ML, MR, NS, SN, CA 2001-2422380 AU 2001-96871 US 2001-953505 US 2001-952836 US 2001-952671 US 2001-955601 US 2001-952833 EP 2001-977779	20010914 <
US 20030083327 US 6610677 EP 1317452 EP 1317452	A1 B2 A1 B1	20030501 20030826 20030611 20060517	US 2001-952833 EP 2001-977779	20010914 <
R: AT, BE, IE, SI, ZA 2003001701 ZA 2003001703 JP 2004509118	CH, DE, DK LT, LV, FI A A T	, ES, FR, RO, MK, 20040301 20040302 20040325	GB, GR, IT, LI, LU, NL, CY, AL, TR ZA 2003-1701 ZA 2003-1703 JP 2002-526861	SE, MC, PT, 20010914 < 20010914 < 20010914 <
US 20040097501 US 7115739 HU 2004001819 US 20050004110 US 7098330	A1 B2 A2 A1 B2	20040520 20061003 20041228 20050106 20060829	US 2001-953471 HU 2004-1819 US 2001-952878	20010914 < 20010914 < 20010914 <
ES 2242771 AT 326458 AT 327990 AT 327992 AT 327991	T3 T T T T	20051116 20060615 20060615 20060615 20060615	CY, AL, TR ZA 2003-1701 ZA 2003-1703 JP 2002-526861 US 2001-953471 HU 2004-1819 US 2001-952878 ES 2001-971006 AT 2001-970969 AT 2001-970971 AT 2001-971082 AT 2001-971082 AT 2001-97779 EP 2006-10798 GB, GR, IT, LI, LU, NL,	20010914 < 20010914 < 20010914 < 20010914 < 20010914 <
TE ST	LT LV FI	RO MK	CY AL TR	
ES 2266258 ES 2266259	T3 T3	20070301 20070301	AT 2001-975210 ES 2001-970971 ES 2001-971082	20010914 < 20010914 <

AT										
M.I	363284		T	20070615	2.00	2001	077703		200100	914 <
			1	20070613	AI	2001-	977783			
	545284		A	20070629 20071219 20020829 20020904	NZ	1984-	5452		200109	914 <
CN	100355750		С	20071219	CN	2001-	817427		200109	914 <
CA	2432303		A1	20020829 20020904 20060608	CA	2001-	2432303		200111	
AII	2002255452		Δ1	20020904	AH	2002-	255452		200113	219 <
			no.	20020304	no	2002	233432		20011	217
	2002255452		BZ	20060608						
CA	2432223		A1	20020906	CA	2001-	2432223		200112	219 <
CA	2432223		С	20080520						
AII	2001297619		A 1	20020912	AII	2001-	297619		20011:	219 <
	2001297619		D2	20060608						
			D2	20000000						
	1345922		A1	20030924		2001-	271061		20011	219 <
EP	1345922		B1	20060531						
	R: AT, BE,	CH.	DE.	DK, ES, FR,	GB, GI	R. IT.	LI. LU.	NL.	SE, MC.	PT.
				FI, RO, MK,			,	,,	,,	,
ED							272061		20011	210 4
	1355905		A1	20031029		2001-	2/3861		20011.	219 <
EP	1355905		В1	20070221						
	R: AT, BE,	CH,	DE,	DK, ES, FR,	GB, GI	R, IT,	LI, LU,	, NL,	SE, MC,	PT,
				FI. RO. MK.	CY. Al	. TR				
5177	526472	,	2	20040430 20040624 20040702	N/7	2001	E26472		20011	219 <
			Α.	20040430	142	2001-	320472		20011	
	2004518743		T	20040624	JP	2002-	565976		20011	219 <
JP	2004519479		A T T B2 A2	20040702	JP	2002-	567928		200112	219 <
.TP	4234435		R2	20090304						
	2004000842		7.2	20040728		2004-	0.12		200112	210 /
			7.2	20040720	no	2004-	506450		20011	213 <
	526473		A	20050624 20060920	NZ	2001-	5264/3		20011.	219 <
EP	1702920		A1	20060920	EP	2006-	11799		20011:	219 <
	R: AT, BE,	CH,	DE.	DK, ES, FR,	GB, GI	R. IT.	LI, LU.	, NL,	SE, MC,	PT,
	TE ST	T.T	1.37	DK, ES, FR, FI, RO, MK,	CV A	om o				
77.3	2002001602	ш.,	ш,	20040201	CI, M	2002	1.000		20020	220
	2003001697		А	20040301	ZA	2003-	169/		20030.	228 <
ZA	2003001699		A	20040301	ZA	2003-	1699		20030	228 <
ZA	2003001700		A	20040301	ZA	2003-	1700		200303	228 <
7.A	2003001702		A	20040301	7.A	2003-	1702		200303	228 <
77	2002001704		70							
	2003001704		A	20040301	ZA	2003-	1704		20030	228 <
ZA	2003001704 2003001698		A A	20040301 20040302	ZA ZA	2003-	1704 1698		20030	228 <
ZA	2003001704 2003001698 2003KN00294		A A A	20040301 20040302 20050311	ZA ZA IN	2003- 2003- 2003-	1704 1698 KN294		20030; 20030; 20030; 20030; 20030; 20030; 20030;	310 <
ZA IN	2003001704 2003001698 2003KN00294 2003001188		A A A	20040301 20040302 20050311 20030513	ZA ZA IN NO	2003- 2003- 2003- 2003-	1704 1698 KN294 1188		20030.	310 <
ZA IN NO	2003001704 2003001698 2003KN00294 2003001188 2003002299		A A A	20040301 20040302 20050311 20030513	ZA ZA IN NO	2003-	KN294 1188		20030	310 <
ZA IN NO MX	2003001704 2003001698 2003KN00294 2003001188 2003002299		A A A A	20040301 20040301 20040301 20040301 20040302 20050311 20030513 20030606	NO MX	2003- 2003- 2003-	KN294 1188 2299		20030 20030 20030	310 < 314 < 317 <
ZA IN NO MX ZA	2003001704 2003001698 2003KN00294 2003001188 2003002299 2003004468		A A A A	20040301 20040302 20050311 20030513 20030606 20040624	NO MX	2003- 2003- 2003-	KN294 1188 2299		20030 20030 20030 20030	310 < 314 < 317 < 609 <
ZA IN NO MX ZA	2003001704 2003001698 2003KN00294 2003001188 2003002299 2003004468 2003004469		A A A A A	20040301 20040302 20050311 20030513 20030606 20040624 20040624	NO MX	2003- 2003- 2003-	KN294 1188 2299		20030 20030 20030	310 < 314 < 317 < 609 <
ZA IN NO MX ZA ZA	2003001704 2003001698 2003KN00294 2003001188 2003002299 2003004468 2003004469 2003004470		A A A A A	20040301 20040302 20050311 20030513 20030606 20040624 20040624 20040624	NO MX	2003- 2003- 2003-	KN294 1188 2299		20030 20030 20030 20030	314 < 317 < 609 <
ZA IN NO MX ZA ZA ZA	2003001704 2003001698 2003KN00294 2003001188 2003002299 2003004468 2003004469 2003004470		A A A A A A	20040301 20040302 20050311 20030513 20030606 20040624 20040624 20040624	NO MX ZA ZA ZA	2003- 2003- 2003- 2003- 2003- 2003-	KN294 1188 2299 4468 4469 4470		20030 20030 20030 20030 20030 20030	310 < 314 < 317 < 609 < 609 <
ZA IN NO MX ZA ZA ZA ZA	2003001704 2003001698 2003KN00294 2003001188 2003002299 2003004468 2003004470 2003004471		A A A A A A	20040301 20040302 20050311 20030513 20030606 20040624 20040624 20040624	NO MX ZA ZA ZA	2003- 2003- 2003- 2003- 2003- 2003-	KN294 1188 2299 4468 4469 4470		200300 200300 200300 200300 200300 200300	310 < 314 < 317 < 609 < 609 < 609 <
ZA IN NO MX ZA ZA ZA ZA ZA	2003001704 2003001698 2003KN00294 2003001188 2003002299 2003004468 2003004469 2003004470 2003004471 2003004473		A A A A A A	20040301 20040302 20050311 20030513 20030606 20040624 20040624 20040624 20040624	NO MX ZA ZA ZA	2003- 2003- 2003- 2003- 2003- 2003-	KN294 1188 2299 4468 4469 4470		20030: 20030: 20030: 20030: 20030: 20030: 20030:	310 < 314 < 317 < 609 < 609 < 609 < 609 <
ZA IN NO MX ZA ZA ZA ZA ZA ZA	2003001704 2003001698 2003KN00294 2003001188 2003002299 2003004468 2003004470 2003004471 2003004473 2003004473		A A A A A A A	20040301 20040302 20050311 20030513 20030606 20040624 20040624 20040624 20040624 20040624	NO MX ZA ZA ZA	2003- 2003- 2003- 2003- 2003- 2003-	KN294 1188 2299 4468 4469 4470		20030: 20030: 20030: 20030: 20030: 20030: 20030: 20030:	310 < 314 < 317 < 609 < 609 < 609 < 609 < 609 <
ZA IN NO MX ZA ZA ZA ZA ZA ZA	2003001704 2003001698 2003XN00294 2003XN00299 2003004468 2003004469 2003004470 2003004471 2003004473 2003004475 2003004472		A A A A A A A A	20040301 20040302 20050311 20030513 20030606 20040624 20040624 20040624 20040624 20040624 20040624	NO MX ZA ZA ZA	2003- 2003- 2003- 2003- 2003- 2003-	KN294 1188 2299 4468 4469 4470		200303 200303 200306 200306 200306 200306 200306 200306 200306	314 < 314 < 317 < 609 < 609 < 609 < 609 < 609 < 609 < 609 <
ZA IN NO MX ZA ZA ZA ZA ZA ZA	2003001704 2003001698 2003001188 2003002299 2003002299 2003004468 2003004470 2003004471 2003004473 2003004475 2003004475 2003004475		A A A A A A A A	20040301 20040302 20050311 20030513 20030606 20040624 20040624 20040624 20040624 20040625 20040625	NO MX ZA ZA ZA	2003- 2003- 2003- 2003- 2003- 2003-	KN294 1188 2299 4468 4469 4470		20030: 20030: 20030: 20030: 20030: 20030: 20030: 20030:	314 < 314 < 317 < 609 < 609 < 609 < 609 < 609 < 609 < 609 <
ZA IN NO MX ZA ZA ZA ZA ZA ZA ZA	2003001704 2003001698 2003XN00294 2003X001188 2003002299 2003004468 2003004470 2003004471 2003004473 2003004475 2003004472 2003004474 2003002704		A A A A A A A A	20040301 20040302 20050311 20030513 20030606 20040624 20040624 20040624 20040624 20040625 20040625	IN NO MX ZA ZA ZA ZA ZA ZA ZA	2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003-	KN294 1188 2299 4468 4469 4470 4471 4473 4475 4475 4472		200300 200300 200300 200300 200300 200300 200300 200300 200300	314 < 317 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 <
ZA IN NO MX ZA ZA ZA ZA ZA ZA ZA ZA	2003001704 2003001698 2003XN00294 2003001188 2003002299 2003004468 2003004470 2003004471 2003004473 2003004472 2003004472 2003004474 2003002704		A A A A A A A A	20040301 20040302 20050311 20030513 20030606 20040624 20040624 20040624 20040625 20040625 20040625	IN NO MX ZA ZA ZA ZA ZA ZA ZA	2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003-	KN294 1188 2299 4468 4469 4470 4471 4473 4475 4472 4474 2704		200300 200300 200300 200300 200300 200300 200300 200300 200300 200300	310 < 3114 < 317 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 613 <
ZA IN NO MX ZA ZA ZA ZA ZA ZA ZA NO MX	2003001704 2003001698 2003001098 2003001188 2003002299 2003004468 2003004470 2003004473 2003004473 2003004472 2003004472 2003004473 2003004474 2003005609		A A A A A A A A A	20040301 20040302 20050311 20030513 20030606 20040624 20040624 20040624 20040624 20040625 20040625 20040625 20030821 20031006	IN NO MX ZA ZA ZA ZA ZA ZA ZA	2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003-	KN294 1188 2299 4468 4469 4470 4471 4473 4475 4472 4474 2704		200300 200300 200300 200300 200300 200300 200300 200300 200300 200300 200300	310 < 3114 < 317 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 613 < 620 <
ZA IN NO XA ZA ZA ZA ZA ZA ZA ZA XA	2003001704 2003001698 2003001698 2003001188 2003002299 2003004469 2003004470 2003004471 2003004472 2003004472 2003004472 2003004472 200300472 200300472 200300472 2003005609 2003005610		A A A A A A A A A A	20040301 20040302 20050311 20030513 20030606 20040624 20040624 20040624 20040624 20040625 20040625 20040625 20030821 20031006	IN NO MX ZA ZA ZA ZA ZA ZA ZA MX	2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003-	KN294 1188 2299 4468 4469 4470 4471 4473 4475 4472 4474 2704 5609 5610		200300 200300 200300 200300 200300 200300 200300 200300 200300 200300 200300 200300	310 < 311 < 317 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 6009 < 6009 < 6009 < 6009 < 6009 < 6009 < 6009 < 6009 <
ZA IN NO XA ZA ZA ZA ZA ZA ZA ZA XA	2003001704 2003001698 2003KN00294 2003001188 2003002299 2003004469 2003004471 2003004471 2003004472 2003004472 2003004472 2003005610 2003005610 20040224944		A A A A A A A A A	20040301 20040302 20050311 20030513 20030513 20030606 20040624 20040624 20040624 20040625 20040625 20040625 20031006 20031006	IN NO MX ZA ZA ZA ZA ZA ZA ZA MX	2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003-	KN294 1188 2299 4468 4469 4470 4471 4473 4475 4475 4472 4474 2704		200300 200300 200300 200300 200300 200300 200300 200300 200300 200300 200300 200300	310 < 3114 < 317 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 613 < 620 <
ZA IN NO MX ZA ZA ZA ZA ZA ZA ZA MO MX MX US	2003001704 2003001698 20038M00294 2003001188 2003002299 2003004469 2003004470 2003004471 2003004472 2003004474 2003002704 2003005609 2003005609 2003005610 20040224944		A A A A A A A A A A A A A A A A A A A	20040301 20040302 20050311 20030513 20030606 20040624 20040624 20040624 20040625 20030821 20031006 200311006 200311006	IN NO MX ZA ZA ZA ZA ZA ZA NO MX US	2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003-	KN294 1188 2299 4468 4469 4470 4471 4473 4475 4472 4474 2704 5609 5610		200300 200300 200300 200300 200300 200300 200300 200300 200300 200300 200300 200300	310 < 311 < 317 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 6009 < 6009 < 6009 < 6009 < 6009 < 6009 < 6009 < 6009 <
ZA IN NO MX ZA ZA ZA ZA ZA ZA XA US US	2003001704 2003001698 20038M00294 2003001188 200300148 2003004469 2003004479 2003004471 2003004472 2003004474 2003004474 2003005609 2003005610 20040224944 700898		A A A A A A A A A A A A A A A A A A A	20040301 20040302 20050311 20030513 20030606 20040624 20040624 20040624 20040625 20040625 20040625 20030821 20031006 20031006 20041111 20060307	IN NO MX ZA ZA ZA ZA ZA ZA ZA NO MX MX US	2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003-	KN294 1188 2299 4468 4469 4470 4471 4473 4475 4475 4474 2704 5609 5610 624800		20030; 20030; 20030; 20030; 20030; 20030; 20030; 20030; 20030; 20030; 20030; 20030; 20030;	310 < 311 < 317 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 613 < 620 < 722 <
ZA IN NO MX ZA ZA ZA ZA ZA ZA ZA UN US US	20040116454		A1	20040617	IN NO MX ZA	2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003-	KN294 1188 2299 4468 4469 4470 4471 4473 4475 4472 4474 2704 5609 5610		20030; 20030; 20030; 20030; 20030; 20030; 20030; 20030; 20030; 20030; 20030; 20030; 20030;	310 < 311 < 317 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 6009 < 6009 < 6009 < 6009 < 6009 < 6009 < 6009 < 6009 <
ZA IN NO MX ZA ZA ZA ZA ZA ZA UN US US US	20040116454 7390815		B2	20040617 20080624	IN NO MX ZA ZA ZA ZA ZA ZA ZA ZA UNO MX MX US	2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003-	RNZ94 1188 2299 4468 4469 4470 4471 4473 4472 4474 2704 5609 5610 624800		20030; 20030; 20030; 20030; 20030; 20030; 20030; 20030; 20030; 20030; 20030; 20030; 20030; 20030; 20030;	310 < 317 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 <-
ZA IN NO MX ZA ZA ZA ZA ZA ZA UN US US US	20040116454		A1 B2 A1	20040617	IN NO MX ZA ZA ZA ZA ZA ZA ZA ZA UNO MX MX US	2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003-	KN294 1188 2299 4468 4469 4470 4471 4473 4475 4475 4474 2704 5609 5610 624800		20030; 20030; 20030; 20030; 20030; 20030; 20030; 20030; 20030; 20030; 20030; 20030; 20030; 20030; 20030;	310 < 311 < 317 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 613 < 620 < 722 <
ZA IN NO MX ZA ZA ZA ZA ZA ZA NO MX US US US US	20040116454 7390815		A1 A1 A1	20040617 20080624	IN NO MX ZA	2003- 2003-	RNZ94 1188 2299 4468 4469 4470 4471 4473 4472 4474 2704 5609 5610 624800		20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030.	310 < 317 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 <-
IN NO MXX ZAA ZAA ZAA ZAA ZAA ZAA ZAA ZAA US US US HK	20040116454 7390815 20040157893 1057888		A1 A1 A1	20040617 20080624 20040812 20061124	IN NO MX ZA	2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003-	RN294 1188 2299 4468 4469 4470 4471 4473 4475 4472 4474 5609 5610 624800 692355 722374 108639		20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030.	310 < 317 < 509 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 600 < 600 < 600 < 600 < 613 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 <-
IN NO MXX ZAA ZAA ZAA ZAA ZAA ZAA ZAA US US US US US US US US	20040116454 7390815 20040157893 1057888 20040132781		A1 B2 A1 A1 A1	20040617 20080624 20040812 20061124 20040708	IN NO NO MX ZA	2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003-	RN294 1188 2299 4468 4469 4470 4471 4473 4475 4472 4474 4474 6609 6619 6624800		20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030.	310 < 317 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 < 600 <-
IN NOO MXX ZAA ZAA ZAA ZAA ZAA ZAA ZAA ZAA USS USS USS USS USS USS USS USS USS	20040116454 7390815 20040157893 1057888 20040132781		A1 B2 A1 A1 A1	20040617 20080624 20040812 20061124 20040708	IN NOO MX ZA NOO MX MX US US HK US	2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003-	KNZ94 1188 2299 4468 4469 4470 4471 4473 4475 4477 2704 5660 622800 692355 722374 108639 736426		20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030.	310 < 317 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 613 < 620 < 722 < 023 < 125 < 126 < 215 <
IN NOO MXX ZAA ZAA ZAA ZAA ZAA ZAA ZAA NOO MXX USS USS USS USS USS USS USS USS USS U	20040116454 7390815 20040157893 1057888 20040132781		A1 B2 A1 A1 A1	20040617 20080624 20040812 20061124 20040708	IN NO NO MX ZA	2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003- 2003-	RN294 1188 2299 4468 4469 4470 4471 4473 4475 4472 4474 5609 5610 624800 692355 722374 108639		20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030.	310 < 317 < 509 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 600 < 600 < 600 < 600 < 613 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 < 620 <-
IN NOO MXX ZAA ZAA ZAA ZAA ZAA ZAA ZAA NOO MXX USS USS USS USS USS USS USS USS USS U	20040116454 7390815 20040157893 1057888 20040132781		A1 B2 A1 A1 A1	20040617 20080624 20040812 20061124 20040708	IN NOO MX ZAA ZAA ZAA ZAA ZAA ZAA ZAA ZAA ZAA ZA	2003- 2003-	RN294 1188 2299 4468 4469 4470 4471 4473 4475 4477 2474 5609 5610 624800 692355 722374 108639 736426		20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030.	310 < 317 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 613 < 620 < 722 < 023 < 125 < 126 < 215 <
INNO MXX ZAA ZAA ZAA ZAA ZAA ZAA ZAA ZAA ZAA Z	20040116454 7390815 20040157893 1057888 20040132781		A1 B2 A1 A1 A1	20040617 20080624 20040812 20061124 20040708	IN NOO MX ZAA ZAA ZAA ZAA ZAA ZAA ZAA ZAA ZAA ZA	2003- 2003-	RN294 1188 2299 4468 4469 4470 4471 4473 4475 4477 2474 5609 5610 624800 692355 722374 108639 736426		20030: 200300: 200300: 200300: 200300: 20030: 20030: 20030: 20030: 20030	310 < 317 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 613 < 620 < 722 < 023 < 125 < 126 < 215 <
INNO MXX ZAA ZAA ZAA ZAA ZAA ZAA ZAA ZAA ZAA Z	20040116454 7390815 20040157893 1057888 20040132781		A1 B2 A1 A1 A1	20040617 20080624 20040812 20061124 20040708	IN NOO MX ZA	2003- 2003-	RN294 1188 2299 4468 4469 4470 4471 4473 4475 4477 2474 5609 5610 624800 692355 722374 108639 736426		20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20031. 20031. 20031.	310 < 317 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 200 < 212 < 212 < 211 < 211 <
INNO MXX ZAA ZAA ZAA ZAA ZAA ZAA ZAA ZAA ZAA Z	20040116454 7390815 20040157893 1057888 20040132781		A1 B2 A1 A1 A1	20040617 20080624 20040812 20061124 20040708	IN NOO MX ZA	2003- 2004- 2004-	RN294 1188 2299 4468 4469 4470 4471 4473 4475 4474 2704 5610 624800 692355 722374 108639 736426 775699		20030: 200300: 200300: 200300: 200300: 200300: 200300: 200300: 200300: 2	310 < 317 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 220 < 2215 < 2210 < 315 < 2217 <
INNO MXX ZAA ZAA ZAA ZAA ZAA ZAA ZAA ZAA ZAA Z	20040116454 7390815 20040157893 1057888 20040132781		A1 B2 A1 A1 A1	20040617 20080624 20040812 20061124 20040708	IN NOO MX ZA	2003- 2003-	RN294 1188 2299 4468 4469 4470 4471 4473 4473 4472 4474 5609 5610 624800 692355 722374 108639 736426 775699 101883 369220		20030. 200300. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 2	310 < 317 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 600 < 200 < 210 < 215 < 210 < 217 < 217 < 217 < 217 < 217 < 217 < 217 <
INNO NOX ZAA ZAA ZAA ZAA ZAA ZAA ZAA ZAA ZAA US US US US US US US US AU	20040116454 7390815 20040157893 1057888 20040132781 7087603 20040167141 7427681 1060347 2005097322 20070270444 2006201228		A1 A1 A1 B2 A1 B2 A1 A1 A1 A1	20040617 20080624 20040812 20061124 20060708 20060802 20040826 20080923 20061201 20050414 20071122	IN NOO MXX ZAA ZAA ZAA ZAA ZAA ZAA ZAA ZAA ZAA Z	2003- 2004- 2004-	RNZ94 1188 2299 44468 4469 4471 4473 4477 4477 4477 4472 4474 2704 5609 622355 722374 108639 775699 101883 366925 369220		20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20031. 20031. 20031. 20040. 20040.	310 < 317 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 202 < 313 < 2126 < 215 < 217 < 316 < 217 < 316 < 217 < 316 < 217 < 316 < 217 < 316 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 < 217 <
INNO NOX ZAA ZAA ZAA ZAA ZAA ZAA ZAA ZAA ZAA US US US US US US US US AU	20040116454 7390815 20040157893 1057888 20040132781		A1 B2 A1 A1 A1	20040617 20080624 20040812 20061124 20040708	IN NOO MXX ZAA ZAA ZAA ZAA ZAA ZAA ZAA ZAA ZAA Z	2003- 2004- 2004-	RN294 1188 2299 4468 4469 4470 4471 4473 4473 4472 4474 5609 5610 624800 692355 722374 108639 736426 775699 101883 369220		20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20030. 20031. 20031. 20031. 20040. 20040.	310 < 317 < 609 < 609 < 609 < 609 < 609 < 609 < 609 < 600 < 200 < 210 < 215 < 210 < 217 < 217 < 217 < 217 < 217 < 217 < 217 <

AU 2006201229 AU 2006201230	B2 A1	20081120 20060413	2/11	2006-201230		20060321	/
AU 2006201230	B2	20080911	no	2000 201230		20000321	`
AU 2006201262	A1	20060427	AU	2006-201262		20060321	<
AU 2006201262	B2	20080904					
AU 2006201263	A1	20060427	AU	2006-201263		20060321	<
AU 2006201263 AU 2006201264	B2 A1	20081030	ΔH	2006-201264		20060321	/
AU 2006201265	A1	20060427		2006-201265		20060321	
AU 2006201265	В2	20080904					
US 20060258658	A1	20061116		2006-492450		20060725	
IN 2007KN02703	A	20080801		2007-KN2703		20070723	
JP 2008115195 JP 2008189682	A A	20080522 20080821		2008-15681 2008-95581		20080125 20080401	
JP 2008169682	A	20081030		2008-95584		20080401	
JP 2008222719	A	20080925		2008-97620		20080403	
JP 2008189687	A	20080821	JP			20080404	<
US 20080287444	A1	20081120		2008-109598		20080425	
JP 2008201808 JP 2008247920	A	20080904	JP JP	2008-121723 2008-121724		20080507	
JP 2008247920 JP 2008247921	A A	20081016		2008-121724		20080507	
AU 2008252044	A1	20090122		2008-252044		20081203	
PRIORITY APPLN. INFO.:			US		P	20000915	
				2000-257887P	P		<
				2001-286949P	P	20010427	<
				2001-296871 2001-296875		20010914	
			AU		A		<
				2001-90944	A3	20010914	<
				2001-91013		20010914	
				2001-94558 2001-96871		20010914	<
				2001-96875		20010914	
			EP			20010914	
			JP	2002-526860			<
				2001-952671			<
				2001-953471 2001-955601			<
				2001-955601 2001-US42152	W		<
				2002-234047	A3		<
				2002-34047	T0		<
			EP		A	20011213	<
			JP	2001-994323 2002-551561			<
				2002-557938			<
				2002-559413			<
			JP				<
				2002-565976			<
			US	2002-567928 2001-26966		20011219	<
				2001-26966 2001-US49139	M	20011219	
				2001-US50312	W	20011219	
				2002-551562		20011220	
				2002-559414		20011220	
			US	2001-34019 2001-34683		20011220 20011220	
				2001-34683 2003-KN795		20011220	
			US			20030722	
				2004-775699		20040210	
OMNIED GOVERNE (A)	wann-	106 04750:	AU	2006-201396	A3	20060404	
OTHER SOURCE(S):	MARPAT	136:247584					

as

- AB Title compds. I [wherein G = Ring C or Ring D; Ring C = (un)substituted Ph. pyridinyl, pyrimidinyl, pyridazinyl, pyrazinyl, or 1,2,4-triazinyl; Ring D = (un)substituted monocyclic or bicyclic ring selected from arvl, heteroaryl, heterocyclyl, or carbocyclyl; Z1 = N or CR9; Z2 = N or CH; Z3 = N or CRx; Z4 = N or CRy; Rx and Ry = independently TR3, or taken together with their intervening atoms form an (un)saturated fused ring having 1-3 ring heteroatoms; R2 and R2a = independently R, TWR6; or C2R2R2a = (un) substituted fused ring containing 0-3 heteroatoms; T = a bond or alkylidene chain; W = C(R6)20, C(R6)2S0-2, C(R6)2NR6, CO, CO2, CR6OCO, CR6OCONR6, C(R6)2NR6CO, C(R6)2NR6CO2, CR6:NNR6, CR6:NO, C(R6)2NR6NR6, C(R6)2NR6SO2NR6, C(R6)2NR6CONR6, or CONR6; R = H or (un)substituted aliphatic, (hetero)aryl, or heterocyclyl ring; R3 = R, halo, O, OR, COR, CO2R, COCOR, COCH2COR, NO2, CN, SO0-2R, N(R4)2, CON(R4)2, SO2N(R4)2, OCOR, NR4COR, NR4CO2(aliphatic), NR4N(R4)2, C:NN(R4)2, C:NOR, NR4CO(R4)2, NR4SO2N(R4)2, NR4SO2R, or OCON(R4)2; R4 = R7, COR7, CO2(aliphatic), CON(R7)2, or SO2R7; or N(R4)2 = heterocyclyl or heteroaryl; R6 and R7 = independently H or (un)substituted aliphatic group; or N(R6)2 = heterocyclyl or heteroaryl; or N(R7)2 = heterocyclyl or heteroaryl; R9 = R, halo, OR, COR, CO2R, COCOR, etc.] were prepared as protein kinase inhibitors, especially
 - inhibitors of Aurora-2 and GSK-3, for treating diseases such as cancer, diabetes, and Alzheimer's disease. Claims cover (pyrimidinyl)pyracylamines and indazolamines I [wherein Z1 = CR9; Z2 and Z3 = N; Z4 = CRy]. Examples include data for approx. 300 invention compds. prepared by a variety of synthetic methods and bioassay results for the inhibition of GSK- β 3, Aurora-2, ERK, and Src. For instance, the N-(4-pyrimidinyl)-3-pyracylamine II was prepared and exhibited Ki values of 0.1 μ M for glycogen synthetase kinase 3 β (GSK-3 β) and 0.1-1.0 μ M for Aurora-2. 404828-10-0P, (5-Methyl-2H-pyrazol-3-yl)(2-pyridin-4-ylquinazolin-
- 4-yl)-amine 404828-11-1P, (7-Chloro-2-pyridin-4-ylquinazolin-4-yl)(5-methyl-2H-pyrazol-3-yl)amine 404828-12-2P, (6-Chloro-2-pyridin-4-ylquinazolin-4-yl)(5-methyl-2Hpyrazol-3-yl)amine 404828-45-1P,
 - [2H-Pyrazol-3-y1](2-pyridin-4-ylquinazolin-4-yl)amine 404828-50-8P (5-tert-Butyl-2H-pyrazol-3-y1)(2-pyridin-4-ylquinazolin-4-yl)amine RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 - (protein kinase inhibitor; preparation of heterocyclylpyrazolamines and analogs as protein kinase inhibitors for treatment of cancer, diabetes, and Alzheimer's disease)

RN 404828-10-0 CAPLUS

CN 4-Quinazolinamine, N-(5-methyl-1H-pyrazol-3-yl)-2-(4-pyridinyl)- (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

404828-11-1 CAPLUS

4-Quinazolinamine, 7-chloro-N-(5-methyl-1H-pyrazol-3-yl)-2-(4-pyridinyl)-CN (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 404828-12-2 CAPLUS

CN

4-Quinazolinamine, 6-chloro-N-(5-methyl-1H-pyrazol-3-yl)-2-(4-pyridinyl)-(CA INDEX NAME)

RN 404828-45-1 CAPLUS

CN 4-Quinazolinamine, N-1H-pyrazol-3-yl-2-(4-pyridinyl)- (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 404828-50-8 CAPLUS

CN 4-Quinazolinamine, N-[5-(1,1-dimethylethyl)-1H-pyrazol-3-yl]-2-(4-pyridinyl)- (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 10 OF 21 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:220583 CAPLUS

DOCUMENT NUMBER: 136:247583

TITLE: Preparation of pyrazolamines and analogs as protein kinase inhibitors for treatment of cancer, diabetes,

and Alzheimer's disease

INVENTOR(S): Davies, Robert; Bebbington, David; Knegtel, Ronald; Wannamaker, Marion; Li, Pan; Forester, Cornelia;

Pierce, Albert; Kay, David

PATENT ASSIGNEE(S):

Vertex Pharmaceuticals Incorporated, USA PCT Int. Appl., 373 pp.

SOURCE: CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 14 PATENT INFORMATION:

PATENT NO.	KIND I	DATE	APPLICATION NO.	DATE
WO 2002022607 W: AE, AG, AL, CO, CR, CU, GM, HR, HU, LS, LT, LU,	A1 2 AM, AT, CZ, DE, ID, IL, LV, MA, SD, SE,	AU, AZ, DK, DM, IN, IS, MD, MG, SG, SI,	WO 2001-US28940 BA, BB, BG, BR, BY, DZ, EC, EE, ES, FI, JF, KE, KG, KP, KR, MK, MN, MW, MX, MZ, SK, SL, TJ, TM, TR,	20010914 < BZ, CA, CH, CN, GB, GD, GE, GH, KZ, LC, LK, LR, NO, NZ, PH, PL,
			SL, SZ, TZ, UG, ZW,	
			IE, IT, LU, MC, NL,	
03 0400070	3.1	20020222	GQ, GW, ML, MR, NE, CA 2001-2422379	20010014
CA 2422379	AI 2	20020321	CA 2001-2422379	20010914 <
AII 2001091013	70 2	20001110	AU 2001-91013 US 2001-953505 US 2001-952836 US 2001-952875	20010914 <
IIS 20030055044	Δ1 3	20020320	IIS 2001-953505	20010314 <
US 6638926	B2 2	20031028	05 2001 333303	20010314
US 20030064981	A1 2	20030403	US 2001-952836	20010914 <
US 6613776	B2 2	20030902		
US 20030064982	A1 2	20030403	US 2001-952875	20010914 <
US 7473691	B2 2	20090106		
		20030417	US 2001-952671	20010914 <
US 6660731	B2 2	20031209		
US 20030078166	A1 2	20030424	US 2001-955601	20010914 <
US 6696452	B2 2	20040224		
US 6660731 US 20030078166 US 6696452 US 20030083327 US 6610677	A1 2	20030501	US 2001-952833	20010914 <
US 6610677	B2 2	20030826		
BR 2001014088	A 2	20030617	BR 2001-14088	20010914 <
EP 1318997 EP 1318997	B1 2	20030618	EP 2001-971082	20010914 <
R: AT, BE, CH,	BI N	20060531	GB, GR, IT, LI, LU,	NI CE MO DE
TE CT IT	TV PT	DO MK	CV AT TD	
HII 2003002173	12 2	20030929	HII 2003-2173	20010914 < 20010914 <
7A 2003002173	Α 2	20030323	ZA 2003-1701	20010914 <
ZA 2003001703	A 2	20040302	ZA 2003-1703	20010911 <
JP 2004509117	Т 2	20040325	JP 2002-526860	20010914 < 20010914 <
JP 4170752	B2 2	20081022		
HU 2003002173 ZA 2003001701 ZA 2003001701 JP 2004509117 JP 4170752 US 20040097501	A1 2	20040520	US 2001-953471	20010914 <
US 7115739 NZ 525008	B2 2	20001003		
NZ 525008	A 2	20041224		
US 20050004110	A1 2	20050106	US 2001-952878	20010914 <
US 7098330	B2 2	20060829		
US 7098330 ES 2242771 AT 326458	T3 2	20051116	ES 2001-971006	20010914 <
AT 326458	T 2	20060615	AT 2001-970969	20010914 <

```
AT 327990 T 20060615 AT 2001-970971 20010914 <--
AT 327992 T 20060615 AT 2001-971082 20010914 <--
AT 327991 T 20060615 AT 2001-973050 20010914 <--
AT 3276459 T 20060615 AT 2001-977779 20010914 <--
EP 1698627 Al 20060906 EP 2006-10798 20010914 <--
                      R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE SI, LT, LV, FI RO, MK, CY, AL TR
AT 346064

EX 3266258

T3 20070301

EX 2266258

T3 20070301

EX 2001-970971

EX 2266258

T3 20070301

EX 2001-970971

EX 2001-971082

CN 1926132

A 20070815

AT 2001-971082

CN 2001-817434

AT 363264

T 20070615

AT 2001-977783

NZ 545284

A 20070615

A 20070629

CN 2001-817427

CN 100355750

C 20071219

CN 2001-817427

CN 2432303

A1 2002829

CA 2001-2432203

AU 2002255452

AI 2002906

AU 2002255452

AU 2002255452

B2 20066608

CA 2432223

CA 2432223

CA 2432223

CA 2432223

CA 2432223

CA 2403223

CA 2403223

CA 2001-2472224

AU 2001297619

AU 2001297619

B2 2006608

ET 1345922

B1 20060518

ET 1345922

B1 20060518

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL,
                                         IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                                                                                                                                                                                                                                                                                    20010914 <--
                                                                                                                                                                                                                                                                                                  20010914 <--
                                                                                                                                                                                                                                                                                                  20010914 <--
                                                                                                                                                                                                                                                                                                  20010914 <--
                                                                                                                                                                                                                                                                                                  20010914 <--
                                                                                                                                                                                                                                                                                                   20010914 <--
                                                                                                                                                                                                                                                                                                   20010914 <--
                                                                                                                                                                                                                                                                                                  20010914 <--
                                                                                                                                                                                                                                                                                                  20011219 <--
                                                                                                                                                                                                                                                                                                   20011219 <--
                                                                                                                                                                                                                                                                                                     20011219 <--
                                                                                                                                                                                                                                                                                                    20011219 <--
                                                                                                                                                                                                                                                                                                   20011219 <--
                     R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
   LE, SI, LT, LV, FI, RO, MK, CY, AL, TR

EP 1355905 A1 20031029 EP 2001-273861 20011219 <--

EP 1355905 B1 20070221

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
                                         IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                         IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
  18, S1, L1, LV, F1, R0, MK, CY, AL, TR

X 526472 A 20040430 NZ 2001-526472 20011219 <--

JP 2004518743 T 20040624 JP 2002-565976 20011219 <--

JP 2004519479 T 20040702 JP 2002-567928 20011219 <--

JP 4234435 B2 20090304

HU 2004000842 A2 20040728 HU 2004-842 20011219 <--

RD 526473 A 20050624 NZ 2001-526473 20011219 <--

EP 1702920 A1 20060920 EP 2006-11799 20011219 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

ZA 2003001697 A 20040301 ZA 2003-1697 20030228 <--
ZA 2003001700 A 20040301 ZA 2003-1697 20030228 <--
ZA 2003001702 A 20040301 ZA 2003-1700 20030228 <--
ZA 2003001702 A 20040301 ZA 2003-1700 20030228 <--
ZA 2003001704 A 20040301 ZA 2003-1704 20030228 <--
ZA 2003001704 A 20040301 ZA 2003-1704 20030228 <--
ZA 2003001704 A 20040301 ZA 2003-1704 20030228 <--
ZA 2003001698 A 20040302 ZA 2003-1704 20030228 <--
ZA 2003001698 A 20040301 ZA 2003-1704 20030228 <--
ZA 2003001698 A 20040301 ZA 2003-1704 20030228 <--
ZA 2003001698 A 20040302 ZA 2003-1698 20030228 <--
XO 2003001191 A 20030513 NO 2003-1698 20030228 <--
XO 2003004468 A 20040624 ZA 2003-4468 20030609 <--
ZA 2003004468 A 20040624 ZA 2003-4468 20030609 <--
ZA 2003004470 A 20040624 ZA 2003-4469 20030609 <--
ZA 2003004471 A 20040624 ZA 2003-4471 20030609 <--
ZA 2003004473 A 20040624 ZA 2003-4471 20030609 <--
ZA 2003004474 A 20040624 ZA 2003-4471 20030609 <--
ZA 2003004475 A 20040624 ZA 2003-4475 20030609 <--
ZA 2003004472 A 20040624 ZA 2003-4475 20030609 <--
ZA 2003004474 A 20040625 ZA 2003-4474 20030609 <--
ZA 2003005609 A 20031006 MX 2003-2704 20030613 <--
XC 2003005609 A 20031006 MX 2003-5609 20030620 <--
XC 2003005609 A 20031006 MX 2003-5610 20030620 <--
XC 2003005609 A 20031006 MX 2003-5610 20030620 <--
XC 2003005609 A 20031006 MX 2003-5609 20030620 <--

                      R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
```

US 7390815	В2	20080624		
US 20040157893	A1	20040812	US 2003-722374	20031125 <
US 20040137893	A1	20040312	US 2003-722374 US 2003-736426	20031123 <
	B2		05 2003-736426	20031213 (
US 7087603 HK 1058356		20060808	HK 2002 100140	20021215
	A1	20061201	HK 2003-109140	20031215 <
US 20040167141	A1	20040826	US 2004-775699	20040210 <
US 7427681	B2	20080923	0001 10100	
HK 1060347	A1	20061201	HK 2004-101883	20040315 <
JP 2005097322	A	20050414	JP 2004-366925	20041217 <
US 20070270444	A1	20071122	US 2006-369220	20060306 <
AU 2006201228	A1	20060413	AU 2006-201228	20060321 <
AU 2006201229	A1	20060413	AU 2006-201229	20060321 <
AU 2006201229	B2	20081120		
AU 2006201230	A1	20060413	AU 2006-201230	20060321 <
AU 2006201230	B2	20080911		
AU 2006201262	A1	20060427	AU 2006-201262	20060321 <
AU 2006201262	B2	20080904		
AU 2006201263	A1	20060427	AU 2006-201263	20060321 <
AU 2006201263	B2	20081030		
AU 2006201264	A1	20060427	AU 2006-201264	20060321 <
AU 2006201265	A1	20060427	AU 2006-201265	20060321 <
AU 2006201265	B2	20080904		
US 20060258658	A1	20061116	US 2006-492450	20060725 <
IN 2007KN02703	A	20080801	IN 2007-KN2703	20070723 <
JP 2008115195	A	20080522	JP 2008-15681	20080125 <
JP 2008189682	A	20080821	JP 2008-95581	20080401 <
JP 2008260767	A	20081030	JP 2008-95584	20080401 <
JP 2008222719	A	20080925	JP 2008-97620	20080403 <
JP 2008189687	A	20080821	JP 2008-98506	20080404 <
US 20080287444	A1	20081120	US 2008-109598	20080425
JP 2008201808	A	20080904	JP 2008-121723	20080507 <
JP 2008247920	A	20081016	JP 2008-121724	20080507 <
JP 2008247921	A	20081016	JP 2008-121727	20080507 <
AU 2008252044	A1	20090122	AU 2008-252044	20081203 <
PRIORITY APPLN. INFO.:			US 2000-232795P	P 20000915 <
			US 2000-257887P	P 20001221 <
			US 2001-286949P	P 20010427 <
			AU 2001-296871	A3 20010914 <
			AU 2001-296875	A3 20010914 <
			AU 2001-90914	A 20010914 <
			AU 2001-90944	A3 20010914 <
			AU 2001-91013	A3 20010914 <
			AU 2001-94558	A3 20010914 <
			AU 2001-96871	T0 20010914 <
			AU 2001-96875	T0 20010914 <
			EP 2001-971082	A3 20010914 <
			JP 2002-526860	A3 20010914 <
			US 2001-952671	A3 20010914 <
			US 2001-953471	A3 20010914 <
			US 2001-955601	A3 20010914 <
			WO 2001-US28940	W 20010914 <
			AU 2002-234047	A3 20011219 <
			AU 2002-34047	T0 20011219 <
			EP 2001-273861	A 20011219 <
			EP 2001-994323	A3 20011219 <
			JP 2002-551561	A3 20011219 <
			JP 2002-557938	A3 20011219 <
			JP 2002-559413	A3 20011219 <
			JP 2002-563142	A3 20011219 <
			JP 2002-565976	A3 20011219 <
			JP 2002-567928	A3 20011219 <
			US 2001-26966	A1 20011219 <

WO	2001-US49139	W	20011219	<
WO	2001-US50312	W	20011219	<
JP	2002-551562	A3	20011220	<
JP	2002-559414	A3	20011220	<
US	2001-34019	A3	20011220	<
US	2001-34683	A1	20011220	<
IN	2003-KN795	A3	20030619	<
US	2003-624800	A3	20030722	<
US	2004-775699	A1	20040210	
AU	2006-201396	A3	20060404	

OTHER SOURCE(S):

MARPAT 136:247583

AB Title compds. I [wherein G = Ring C or Ring D; Ring C = (un)substituted Ph, pyridinyl, pyrimidinyl, pyridazinyl, pyrazinyl, or 1,2,4-triazinyl; Ring D = (un)substituted monocyclic or bicyclic ring selected from aryl, heteroarvl, heterocyclyl, or carbocyclyl; Z1 = N or CR9; Z2 = N or CH; Z3 = N or CRx; Z4 = N or CRy; Rx and Ry = independently TR3, or taken together with their intervening atoms form an (un)saturated fused ring having 1-3 ring heteroatoms; R2 and R2a = independently R, TWR6; or C2R2R2a = (un) substituted fused ring containing 0-3 heteroatoms; T = a bond or alkylidene chain; W = C(R6)20, C(R6)2S0-2, C(R6)2NR6, CO, CO2, CR6OCO, CR6OCONR6, C(R6)2NR6CO, C(R6)2NR6CO2, CR6:NNR6, CR6:NO, C(R6)2NR6NR6, C(R6)2NR6SO2NR6, C(R6)2NR6CONR6, or CONR6; R = H or (un)substituted aliphatic, (hetero)aryl, or heterocyclyl ring; R3 = R, halo, O, OR, COR, CO2R, COCOR, COCH2COR, NO2, CN, SO0-2R, N(R4)2, CON(R4)2, SO2N(R4)2, OCOR, NR4COR, NR4CO2(aliphatic), NR4N(R4)2, C:NN(R4)2, C:NOR, NR4CO(R4)2, NR4SO2N(R4)2, NR4SO2R, or OCON(R4)2; R4 = R7, COR7, CO2(aliphatic), CON(R7)2, or SO2R7; or N(R4)2 = heterocyclyl or heteroaryl; R6 and R7 = independently H or (un)substituted aliphatic group; or N(R6)2 = heterocyclyl or heteroaryl; or N(R7)2 = heterocyclyl or heteroaryl; R9 = R, halo, OR, COR, CO2R, COCOR, etc.] were prepared as protein kinase inhibitors, especially as

inhibitors of Aurora-2 and GSK-3, for treating diseases such as cancer, diabetes, and Alzheimer's disease. Claims cover (pyrimidinyl)pyrazolamines and indazolamines I [wherein Z1 and Z2 = N; Z3 = CRx; Z4 = CRy; G = Ring C]. Examples include data for approx. 300 invention compds. prepared by a variety of synthetic methods and bioassay results for the inhibition of GSK-B3, Aurora-2, ERK, and Src. For instance, the N-(4-pyrimidinyl)-3-pyrazolamine II was prepared and exhibited Ki values of < 0.1 μM for glycogen synthetase kinase 3β (GSK-3B) and 0.1-1.0 μM for Aurora-2.

IIT 404828-10-0P, (5-Methyl-2H-pyrazol-3-yl)(2-pyridin-4-ylquinazolin-4-yl)-amine 404828-11-1P, (7-Chloro-2-pyridin-4-ylquinazolin-4-yl)(5-methyl-2H-pyrazol-3-yl)amine 404828-12-2P, (6-Chloro-2-pyridin-4-ylquinazolin-4-yl)(5-methyl-2H-pyrazol-3-yl)amine 404828-45-1P,

'2H-Pyrazol-3-yl)(2-pyridin-4-ylquinazolin-4-yl)amine 404828-50-8P (5-tert-Butyl-2H-pyrazol-3-yl)(2-pyridin-4-yl)amine RI: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(protein kinase inhibitor; preparation of heterocyclylpyrazolamines and analogs as protein kinase inhibitors for treatment of cancer, diabetes, and Alzheimer's disease)

RN 404828-10-0 CAPLUS

CN 4-Quinazolinamine, N-(5-methyl-1H-pyrazol-3-yl)-2-(4-pyridinyl)- (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 404828-11-1 CAPLUS

CN 4-Quinazolinamine, 7-chloro-N-(5-methyl-1H-pyrazol-3-yl)-2-(4-pyridinyl)-(CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 404828-12-2 CAPLUS

CN 4-Quinazolinamine, 6-chloro-N-(5-methyl-1H-pyrazol-3-yl)-2-(4-pyridinyl)-(CA INDEX NAME)

RN 404828-45-1 CAPLUS

CN 4-Quinazolinamine, N-1H-pyrazol-3-yl-2-(4-pyridinyl)- (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 404828-50-8 CAPLUS

CN 4-Quinazolinamine, N-[5-(1,1-dimethylethyl)-1H-pyrazol-3-yl]-2-(4-pyridinyl)- (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 11 OF 21 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:220582 CAPLUS

DOCUMENT NUMBER: 136:247582

TITLE: Preparation of pyrazolamines and analogs as protein kinase inhibitors for treatment of cancer, diabetes,

and Alzheimer's disease

INVENTOR(S): Bebbington, David; Binch, Hayley; Knegtel, Ronald; Golec, Julian M. C.; Patel, Sanjay; Charrier,

Jean-Damien; Kay, David; Davies, Robert; Li, Pan; Wannamaker, Marion; Forster, Cornelia; Pierce, Albert

PATENT ASSIGNEE(S): Vertex Pharmaceuticals Incorporated, USA

SOURCE: PCT Int. Appl., 355 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 14

PATENT INFORMATION:

PATE	NT NO.			KIN	D	DATE			APPL	ICAT	ION I	NO.		D.	ATE		
WO 2	00202260	16		A1		2002	0321		WO 2	001-	IIS28:	803		2	0010	914	<
										BG,							
										EE,							
										KG,							
										MW,							
										TJ,							
	US,	UZ,	VN,	YU,	ZA,	ZW											
	RW: GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,	
	DE,	DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,	
	BJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG		
CA 2	422378			A1		2002	0321		CA 2	001-	2422	378		2	0010	914	<
AU 2	00109094	14		A		2002	0326		AU 2	001-	9094	4		2	0010	914	<
US 2	00300550	44		A1		2003	0320		US 2	001-	9535	05		2	0010	914	<
US 6	638926			B2		2003	1028										
US 2	00300649	81		A1		2003	0403		US 2	001-	9528	36		2	0010	914	<
US 6	613776			B2		2003	0902										
US 2	00300649	82		A1		2003	0403		US 2	001-	9528	75		2	0010	914	<
US 7	473691			B2		2009	0106										
US 2	00300736	87		A1		2003	0417		US 2	001-	9526	/1		2	0010	914	<
US 6	660731			B2		2003	1209		0								
US 2	BJ, 422378 00109094 00300556 638926 00300649 473691 00300736 660731 00300781 696452 00300833 610677 317448	166		A1		2003	0424		US 2	001-	9556	01		2	0010	914	<
05 6	096452	0.77		B2		2004	0224			001	0.00	2.2		-	0010	011	
US 2	(10677	321		AI		2003	0000		05 2	001-	9528.	33		2	0010	914	<
U 0 0 0	217//0			7.1		2003	0620		מים	001-	0710	0.6		2	0010	014	_
	317448			B1		2005			EF Z	001-	5/10	00			0010	214	\
	R: AT,		CH					CB	CD	TT	T. T	T.II	MT.	SE	MC	PТ	
HII 2	00300241	11		A2	,	2003	1128	01/	HII 2	003-	2411			2	0010	914	<
ZA 2	0030024)1		A		2004	0301		7A 2	003-	1701			2	0010	914	<
ZA 2	00300170)3		A		2004	0302		ZA 2	003-	1703			2	0010	914	<
JP 2	00450911	16		T		2004	0325		JP 2	002-	5268	59		2	0010	914	<
JP 4	1E, 00300241 00300170 00300170 00450911 105949			B2		2008	0625										
US 2	00400975	01		A1		2004	0520		US 2	001-	9534	71		2	0010	914	<
US 7	115739			B2		2006	1003										
US 2	00500041	110		A1		2005	0106		US 2	001-	9528	78		2	0010	914	<
US 7	098330			B2		2006	0829										
AT 2	94797			T		2005	0515		AT 2	001-	9710	06		2	0010	914	<
ES 2	242771			Т3		2005	1116		ES 2	001-	9710	06		2	0010	914	<
AT 3	26458			T		2006	0615		AT 2	001-	9709	69		2	0010	914	<
AT 3	00400975 115739 00500041 098330 94797 2242771 226458 27990			T		2006	0615		AT 2	001-	9709	71		2	0010	914	<

AT	327992		T	20060615	AT	2001-971082		20010914 <	
AΤ	327991		т	20060615	ΔT	2001-973050		20010914 <	
a T	226450		T	20060616	7.77	2001 977770		20010011	
nn.	1000007		3.1	20000013	nn nn	2001 377773		20010914 < 20010914 < 20010914 < 20010914 <	
EP	1698627		AI	20060906	EP	2006-10798		20010914 <	
	R: AT, BE,	CH,	DE,	DK, ES, FR,	GB, G	R, IT, LI, LU,	NL,	SE, MC, PT,	
	IE, SI,	LT,	LV,	FI, RO, MK,	CY, A	L, TR			
AT	346064		T	20061215	AT	2001-975210		20010914 <	
ES	2266258		Т3	20070301	ES	2001-970971		20010914 <	
ES	2266259		Т3	20070301	ES	2001-971082		20010914 <	
3.7	363304		т	20070615	7.7	2001-077793		20010914	
27.1	505204 E4E204		2	20070013	MI	1004 5452		20010314 <	
NZ.	343284		A	20070629	IN Zi	1984-3432		20010914 <	
CM	100355750		C	200/1219	CN	2001-81/42/		20010914 <	
CA	2432303		A1	20020829	CA	2001-2432303		20011219 <	
ΑU	2002255452		A1	20020904	AU	2002-255452		20011219 <	
AU	2002255452		B2	20060608					
CA	2432223		A1	20020906	CA	2001-2432223		20011219 <	
CA	2432223		C	20080520					
711	2001297619		7.1	200000020	7.11	2001-207610		20011219 /	
211	2001297019		D.3	20020312	AU	2001-257015		20011213 <	
AU	2001297619		D2	20000000					
EP	1345922		AI	20030924	EP	2001-2/1061		20011219 <	
EP	1345922		В1	20060531				20010914 < 20010914 < 20010914 < 20010914 < 20010914 < 20010914 < 200101219 < 20011219 < 20011219 < 20011219 < 20011219 < 5E, MC, FT,	
	R: AT, BE,	CH,	DE,	DK, ES, FR,	GB, G	R, IT, LI, LU,	NL,	SE, MC, PT,	
	IE, SI,	LT,	1.37	ET DO MK	CV A	I. TD			
EP	1355905		A1	20031029	EP	2001-273861		20011219 <	
EP	1355905 1355905		B1	20070221					
D.			DE	DV FC FD	CD C	R, IT, LI, LU,	NIT	CF MC DT	
	IE, 51,	ы,	ь,	FI, RO, MK,	CI, A	L, IK		00011010	
NZ	526472		A	20040430	NZ	2001-526472		20011219 <	
JP	2004518743		Т	20040624	JP	2002-565976		20011219 <	
JΡ	2004519479		T	20040702	JP	2002-567928		20011219 <	
JΡ	4234435		B2	20090304					
JP HU	4234435 2004000842		B2 A2	20090304 20040728	HU	2004-842		20011219 <	
JP HU NZ	4234435 2004000842 526473		B2 A2 A	20090304 20040728 20050624	HU NZ	2004-842 2001-526473		20011219 <	
JP HU NZ	4234435 2004000842 526473		B2 A2 A	20090304 20040728 20050624 20060920	HU NZ	2004-842 2001-526473 2006-11799		20011219 < 20011219 < 20011219 <	
JP HU NZ EP	4234435 2004000842 526473 1702920	CU	A2 A A1	20090304 20040728 20050624 20060920	HU NZ EP	2004-842 2001-526473 2006-11799	NI	20011219 < 20011219 < 20011219 < 20011219 < 20011219 < 20011219 < 20011219 <	
JP HU NZ EP	4234435 2004000842 526473 1702920 R: AT, BE,	CH,	B2 A2 A A1 DE,	20090304 20040728 20050624 20060920 DK, ES, FR,	HU NZ EP GB, G	2004-842 2001-526473 2006-11799 R, IT, LI, LU,	NL,	20011219 < 20011219 < 20011219 < SE, MC, PT,	
JP HU NZ EP	4234435 2004000842 526473 1702920 R: AT, BE, IE, SI,	CH, LT,	B2 A2 A A1 DE, LV,	20090304 20040728 20050624 20060920 DK, ES, FR, FI, RO, MK,	HU NZ EP GB, G CY, A	2004-842 2001-526473 2006-11799 R, IT, LI, LU, L, TR	NL,	20011219 < 20011219 < 20011219 < SE, MC, PT,	
JP HU NZ EP	4234435 2004000842 526473 1702920 R: AT, BE, IE, SI, 2003001697	CH, LT,	B2 A2 A A1 DE, LV, A	20090304 20040728 20050624 20060920 DK, ES, FR, FI, RO, MK, 20040301	HU NZ EP GB, G CY, A	2004-842 2001-526473 2006-11799 R, IT, LI, LU, L, TR 2003-1697	NL,	20011219 < 20011219 < 20011219 < SE, MC, PT, 20030228 <	
JP HU NZ EP ZA ZA	4234435 2004000842 526473 1702920 R: AT, BE, IE, SI, 2003001697 2003001699	CH, LT,	B2 A2 A A1 DE, LV, A	20090304 20040728 20050624 20060920 DK, ES, FR, FI, RO, MK, 20040301 20040301	HU NZ EP GB, G CY, A ZA	2004-842 2001-526473 2006-11799 R, IT, LI, LU, L, TR 2003-1697 2003-1699	NL,	20011219 < 20011219 < 20011219 < SE, MC, PT, 20030228 < 20030228 <	
JP HU NZ EP ZA ZA ZA	4234435 2004000842 526473 1702920 R: AT, BE, IE, SI, 2003001697 2003001699 2003001700	CH, LT,	B2 A2 A A1 DE, LV, A A	20090304 20040728 20050624 20060920 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301	HU NZ EP GB, G CY, A ZA ZA	2004-842 2001-526473 2006-11799 R, IT, LI, LU, L, TR 2003-1697 2003-1699 2003-1700	NL,	20011219 < 20011219 < 20011219 < SE, MC, PT, 20030228 < 20030228 < 20030228 <	
JP HU NZ EP ZA ZA ZA ZA	4234435 2004000842 526473 1702920 R: AT, BE, IE, SI, 2003001697 2003001699 2003001700 2003001702	CH, LT,	B2 A2 A1 DE, LV, A A	20090304 20040728 20050624 20060920 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301	HU NZ EP GB, G CY, A ZA ZA ZA	2004-842 2001-526473 2006-11799 R, IT, LI, LU, L, TR 2003-1697 2003-1700 2003-1700 2003-1702	NL,	20011219 < 20011219 < 20011219 < SE, MC, PT, 20030228 < 20030228 < 20030228 <	
JP HU NZ EP ZA ZA ZA ZA ZA	4234435 2004000842 526473 1702920 R: AT, BE, 1E, SI, 2003001697 2003001700 2003001700 2003001702 2003001704	CH, LT,	B2 A2 A1 DE, LV, A A A	20090304 20040728 20050624 20060920 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301 20040301 20040301	HU NZ EP GB, G CY, A ZA ZA ZA ZA	2004-842 2001-526473 2006-11799 R, IT, LI, LU, L, TR 2003-1697 2003-1700 2003-1702 2003-1702	NL,	20011219 < 20011219 < 20011219 < 20011219 < SE, MC, PT, 20030228 < 20030228 < 20030228 < 20030228 < 20030228 <	
JP HU NZ EP ZA ZA ZA ZA ZA ZA	4234435 2004000842 526473 1702920 R: AT, BE, IE, SI, 2003001697 2003001700 2003001700 2003001704 2003001698	CH, LT,	B2 A2 A1 DE, LV, A A A A	20090304 20040728 20050624 20060920 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301 20040301 20040301 20040301	HU NZ EP GB, G CY, A ZA ZA ZA ZA	2004-842 2001-526473 2006-11799 R, IT, LT, LU, L, TR 2003-1697 2003-1700 2003-1700 2003-1702 2003-1704 2003-1698	NL,	20011219 < 20011219 < 20011219 < SE, MC, PT, 20030228 < 20030228 < 20030228 < 20030228 < 20030228 < 20030228 <	
JP HU NZ EP ZA ZA ZA ZA ZA ZA	4234435 2004000842 526473 1702920 R: AT, BE, IE, SI, 2003001697 2003001700 2003001700 2003001702 2003001704 2003001698 2003N000293	CH, LT,	B2 A2 A1 DE, LV, A A A A	20090304 20040728 20050624 20060920 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301 20040301 20040302 20090311	HU NZ EP GB, G CY, A ZA ZA ZA ZA ZA	2004-842 2001-526473 2006-11799 R, IT, LI, LU, L, TR 2003-1699 2003-1700 2003-1700 2003-1704 2003-1699 2003-1704	NL,	20011219 < 20011219 < 20011219 < 20011219 < SE, MC, PT, 20030228 < 20030228 < 20030228 < 20030228 < 20030228 < 20030238 < 20030238 <	
JP HU NZ EP ZA ZA ZA ZA ZA IN	4234435 2004000842 526473 1702920 R: AT, BE, IE, SI, 2003001697 2003001700 2003001700 2003001704 2003001698 2003N00293	CH, LT,	B2 A2 A1 DE, LV, A A A A	20090304 20040728 20050624 20060920 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301 20040302 20040302 20050311	HU NZ EP GB, G CY, A ZA ZA ZA ZA ZA	2004-842 2001-526473 2006-11799 R, IT, LI, LU, L, TR 2003-1699 2003-1700 2003-1702 2003-1702 2003-1704 2003-1898 2003-18189	NL,	20011219 < 20011219 < 20011219 < 20011219 < E, MC, FT, 20030228 < 20030228 < 20030228 < 20030228 < 20030228 < 20030310 < 20030314 <	
JP HU NZ EP ZA ZA ZA ZA ZA IN NO	4234435 2004000842 526473 1702920 R: AT, BE, IE, SI, 2003001697 2003001699 2003001700 2003001702 2003001704 2003001699 2003001704 2003001699	CH, LT,	B2 A2 A A1 DE, LV, A A A A	20090304 20040728 20050624 20060920 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301 20040301 20040302 20050311 20030513	HU NZ EP GB, G CY, A ZA ZA ZA ZA ZA ZA	2004-842 2001-526473 2006-11799 R, IT, LI, LU, L, TR 2003-1699 2003-1700 2003-1702 2003-1704 2003-1704 2003-1898 2003-KN293 2003-1189	NL,	20011219 < 20011219 < 20011219 < 5E, MC, PT, 20030228 < 20030228 < 20030228 < 20030228 < 20030218 < 20030218 < 20030214 <	
JP HU NZ EP ZA ZA ZA ZA ZA IN NO KR	4234435 2004000842 526473 1702920 R: AT, BE, 1E, SI, 2003001697 2003001700 2003001700 2003001704 2003001704 2003001708 2003001708 2003001708 2003001708 2003001708 876069	CH, LT,	B2 A2 A A1 DE, LV, A A A A A A	20090304 20040728 20050624 20060920 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301 20040301 20040301 20040301	HU NZ EP GB, G CY, A ZA ZA ZA ZA ZA ZA	2004-842 2001-526473 2006-11799 R, IT, LI, LU, L, TR 2003-1699 2003-1700 2003-1702 2003-1702 2003-1704 2003-1898 2003-1898 2003-1898	NL,	20011219 < 20011219 < 20011219 < 20011219 < 5E, MC, FT, 20030228 < 20030228 < 20030228 < 20030228 < 20030218 < 20030314 < 20030314 <	
JP HU NZ EP ZA ZA ZA ZA IN NO KR MX	4234435 2004000842 526473 1702920 R: AT, BE, IE, SI, 2003001699 2003001700 2003001702 2003001704 2003001708 2003001189 876069 2003001293	CH, LT,	B2 A2 A1 DE, LV, A A A A A B1 A	20090304 20040728 20060920 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301 20040301 20040301 20040303 20050311 20030513 20050311 20030606	HU NZ EP GB, G CY, A ZA ZA ZA ZA ZA ZA KA ZA	2004-842 2001-526473 2006-11799 R, IT, LI, LU, L, TR 2003-1697 2003-1700 2003-1700 2003-1704 2003-1698 2003-1899 2003-1189 2003-703800 2003-2293	NL,	20011219 < 20011219 < 20011219 < 20011219 < SE, MC, PT, 20030228 < 20030228 < 20030228 < 20030218 < 20030311 < 20030314 < 20030314 < 20030314 < 20030314 <	
JP HU NZ EP ZA ZA ZA ZA IN NO KR MX ZA	4234435 2004000842 526473 1702220 R: AT, BE, 1203001697 2003001700 2003001700 2003001700 2003001700 2003001700 2003001700 2003001700 200300198 2003KN00293 200300189 876069 2003002293	CH, LT,	B2 A2 A1 DE, LV, A A A A A B1 A	20090304 20040728 20060920 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301 20040302 20040301 20040303 20040303 20040302 20050311 20030503 20081226 20030606	HU NZ EP GB, G CY, A ZA ZA ZA ZA ZA IN NC KR MX	2004-842 2001-526473 2006-11799 R, IT, LI, LU, L, TR 2003-1699 2003-1700 2003-1700 2003-1704 2003-1898 2003-KN293 2003-KN293 2003-05880 2003-2293	NL,	20011219 < 20011219 < 20011219 < 20011219 < SE, MC, PT, 20030228 < 20030228 < 20030228 < 20030218 < 2003010 < 2003011 < 20030314 < 20030317 < 20030317 < 20030309 <	
JP HU NZ ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA	4234435 2004000842 526473 1702920 R: AT, BE, 1E, ST, 2003001697 2003001700 2003001700 2003001704 2003001189 876069 2003001293 2003001468	CH, LT,	B2 A2 A1 DE, LV, A A A A A A A A	20090304 20040728 20050624 2006022 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301 20040301 20040301 20040302 20050311 20030513 20081226 20030606 20040624	HU NZ EP GB, GCY, A ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA	2004-842 2001-526473 2006-11799 R, IT, LI, LU, L, TR 2003-1697 2003-1697 2003-1700 2003-1700 2003-1704 2003-1698 2003-1899 2003-2003-203 2003-4469	NL,	20011219 < 20011219 < 20011219 < 20011219 < SE, MC, PT, 20030228 < 20030228 < 20030228 < 20030218 < 20030314 < 20030314 < 20030317 < 20030609 < 20030609 <	
JP HU NZ ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA	4234435 2004000842 526473 1702920 R: AT, BE, 2003001699 2003001702 2003001704 2003001704 2003001705 2003001706 2003001706 2003001706 2003001706 2003001706 2003001706 2003001706 2003001699 2003001699 2003001699 2003001699	CH, LT,	B2 A2 A A1 DE, A A A A A A A A A A	20090304 20040728 20060920 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301 20040301 20040301 20040302 20050311 20030513 20081226 20030606 20040624 20040624	HU NZ EPP GB, G CY, A ZA ZA ZA ZA IN KR MX ZA ZA ZA ZA	2004-842 2001-526473 2006-11799 R, IT, LI, LU, L TR 2003-1697 2003-1702 2003-1702 2003-1704 2003-1704 2003-1704 2003-1704 2003-203 2003-203 2003-4698 2003-4468 2003-4468	NL,	20011219 < 20011219 < 20011219 < 20011219 < SE, MC, PT, 20030228 < 20030228 < 20030228 < 20030218 < 2003014 < 20030314 < 20030314 < 20030317 < 2003069 < 2003069 < 2003069 < 2003069 <	
JP HU NZ ZA ZA ZA ZA ZA IN NO KR MX ZA ZA ZA ZA	4234435 2004000842 526473 1702920 R: AT, BE, IE, ST, 2003001697 2003001700 2003001700 2003001704 2003001189 876069 2003001489 2003004470	CH, LT,	B2 A2 A1 DE, LV, A A A A A A A A A A	20090304 20040728 20050624 2006022 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301 20040301 20040301 20040301 20040301 20040301 20050311 20030513 20081226 20030606 20040624 20040624	HU NZ EP GB, GCY, A ZA ZA ZA ZA IN NC KR MX ZA ZA ZA	2004-842 2001-526473 2006-11799 R, IT, LI, LU, L, TR 2003-1697 2003-1697 2003-1700 2003-1700 2003-1704 2003-1704 2003-189 2003-189 2003-488 2003-4470 2003-4469 2003-4470	NL,	20011219 < 20011219 < 20011219 < 20011219 < 20030228 < 20030228 < 20030228 < 20030228 < 20030214 < 20030314 < 20030314 < 20030317 < 20030609 < 20030609 < 20030609 < 20030609 <	
JP HU NZ ZA ZA ZA ZA ZA IN NO KR ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA	4234435 2004000842 526473 1702920 R: AT, BE, 2003001697 2003001702 2003001702 2003001704 2003001704 2003001899 2003001704 200300189 200300189 200300189 2003001402 2003001402 2003004470 2003004473	CH, LT,	B2 A2 A1 DE, A A A A A A A A A A A A A A A A A A A	20090304 20040728 20050624 20060624 20060624 2006020 DK, ES, FR, 20040301 20040301 20040301 20040301 20040301 20040301 20050311 20030513 20081226 20030606 20040624 20040624 20040624 20040624	HU EZ EZ GB, G CY, A ZA	2004-842 2001-526473 2006-11799 R, IT, LI, LU, L, TR 2003-1699 2003-1702 2003-1702 2003-1704 2003-1899 2003-1899 2003-2038-0704 2003-2038-0704 2003-4698 2003-4468 2003-4468 2003-4470 2003-4471	NL,	20011219 < 20011219 < 20011219 < 20011219 < SE, MC, PT, 20030228 < 20030228 < 20030228 < 2003021 < 2003021 < 20030314 < 20030314 < 20030317 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 <	
JP HU NZ ZA ZA ZA ZA ZA IN NO KR ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA	4234435 2004000842 526473 1702920 R: AT, BE, IE, SIT, 2003001697 2003001700 2003001700 2003001704 2003001189 876069 2003001408 20030004470 20030004471 20030004475	CH, LT,	B2 A2 A A1 DE, LV, A A A A A A A A A A A A A A A A A A A	20090304 20040728 20050624 2006022 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301 20040301 20040301 20040301 20050311 20030513 20081226 20030606 20040624 20040624 20040624 20040624	HU NZ EP GB, G CY, A ZA	2004-842 2001-526473 2006-11799 R, IT, LI, LU, L, TR 2003-1697 2003-1697 2003-1700 2003-1700 2003-1704 2003-1704 2003-189 2003-189 2003-488 2003-4470 2003-4470 2003-4470	NL,	20011219 < 20011219 < 20011219 < 20011219 < 20011219 < 5E, MC, PT, 20030228 < 20030228 < 20030228 < 20030214 < 20030314 < 20030314 < 20030317 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030	
JP HU NZ ZA ZA ZA ZA ZA IN NO KR ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA	4234435 2004000842 526473 1702920 R: AT, BE, 2003001697 2003001702 2003001702 2003001704 2003001704 2003001899 2003001704 200300189 200300189 2003001402 2003001470 2003004473 2003004473	CH, LT,	B2 A2 A A1 DE, LV, A A A A A A A A A A A A A A A A A A A	20090304 20040728 20050624 20060624 20060624 2006020 DK, ES, FR, 20040301 20040301 20040301 20040301 20040301 20040301 20050311 20030513 20081226 20030606 20040624 20040624 20040624 20040624 20040624 20040624 20040624	HU NZ EPP GB, G CY, A ZA ZA ZA ZA IN NC KR MX ZA ZA ZA ZA ZA ZA	2004-842 2001-526473 2006-11799 R, IT, LI, LU, L, TR 2003-1699 2003-1702 2003-1702 2003-1704 2003-1899 2003-1899 2003-189 2003-203 2003-203 2003-4468 2003-4469 2003-4473 2003-4473	NL,	20011219 < 20011219 < 20011219 < 20011219 < 20011219 < SE, MC, PT, 20030228 < 20030228 < 20030228 < 20030210 < 20030314 < 20030314 < 20030317 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030	
JP HU NZ EP ZA	4234435 2004000842 526473 1702920 R: AT, BE, IE, SIT, 2003001697 2003001700 2003001700 2003001704 2003001189 876069 200300293 2003004470 2003004472 2003004472	CH, LT,	B2 A2 A A A A A A A A A A A A A A A A A	20090304 20040728 20050624 20060920 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301 20040301 20040301 20040302 20050311 20030513 20030512 20030606 20040624 20040624 20040624 20040624 20040624 20040624 20040624	HU NZ EP GB, G CY, A ZA	2004-842 2001-526473 2006-11799 R, IT, LI, LU, L, TR 2003-1697 2003-1697 2003-1700 2003-1700 2003-1704 2003-1704 2003-1698 2003-2003-2003-2003-2003-4189 2003-4470 2003-4470 2003-4470 2003-4470 2003-4470 2003-4470 2003-4470	NL,	20011219 < 20011219 < 20011219 < 20011219 < 20011219 < 20030228 < 20030228 < 20030228 < 20030228 < 20030214 < 20030314 < 20030314 < 20030314 < 20030319 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 <	
JP HU NZ EP ZA	4234435 2004000842 526473 1702920 R: AT, BE, 1E, SI, 2003001697 2003001700 2003001702 2003001704 2003001708 2003001189 876069 200300293 2003004470 2003004472 2003004472	CH, LT,	B2 A2 A A A A A A A A A A A A A A A A A	20090304 20040728 20050624 20060920 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301 20040301 20040301 20040301 20050311 20030513 20081226 20030606 20040624 20040624 20040624 20040624 20040624 20040624 20040624 20040625 20040625 20040625	HU NZ EP GB, G CY, A ZA	2004-842 2001-526473 2006-11799 R, IT, LI, LU, L, TR 2003-1699 2003-1702 2003-1702 2003-1704 2003-1698 2003-1704 2003-1898 2003-1898 2003-03800 2003-2293 2003-03800 2003-4474 2003-4473 2003-4472 2003-4472	NL,	20011219 < 20011219 < 20011219 < 20011219 < SE, MC, PT, 20030228 < 20030228 < 20030228 < 20030238 < 20030314 < 20030314 < 20030314 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 2003069 < 200306	
JP HU NZ EP ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA	4234435 2004000842 526473 1702920 R: AT, BE, SI, 2003001659 2003001702 2003001702 2003001702 2003001702 2003001702 2003001702 2003001702 2003001469 2003004470 2003004477 2003004477 2003004472 2003004472 2003004472	CH, LT,	B2 A2 A A A A A A A A A A A A A A A A A	20090304 20040728 20050624 20060920 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301 20040301 20040302 20050311 20030513 20081226 2003060 20040624 20040624 20040624 20040624 20040625 20040625 20040625 20040625 20040625	HU NZ EP GB, G CY, A ZA	2004-842 2001-526473 2006-11799 R, IT, LI, LU, L TR 2003-1699 2003-1700 2003-1702 2003-1702 2003-1702 2003-1898 2003-8N293 2003-8N293 2003-8N293 2003-4449 2003-4447 2003-4473 2003-4473 2003-4473 2003-4472 2003-4472 2003-4472	NL,	20011219 < 20011219 < 20011219 < 20011219 < 20011219 < 20030228 < 20030228 < 20030228 < 20030228 < 20030214 < 20030314 < 20030314 < 20030317 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 <	
JP HU NZ EP ZA	4234435 2004000842 526473 1702920 R: AT, BE, 1E, SI, 2003001697 2003001700 2003001704 2003001704 2003001189 876069 200300293 2003004470 2003004473 2003004475 2003004474 2003002704	CH, LT,	B2 A2 A A A A A A A A A A A A A A A A A	20090304 20040728 20050624 20060624 20060624 2006020 DK, ES, FF, FI, RO, MK, 20040301 20040301 20040301 20040301 20050311 20030513 20081226 20030606 20040624 20040624 20040624 20040625 20040625 20040625 20040625 20040625 20040625 20040625 20040625 20040625 20040625 20040625 20040625 20040625 20040625	HU NZ EP GB, G CY, A ZA	2004-842 2001-526473 2006-11799 R, JT, LI, LU, L, TR 2003-1699 2003-1700 2003-1700 2003-1704 2003-1899 2003-1899 2003-2033 2003-489 2003-489 2003-4468 2003-4472 2003-4472 2003-4472 2003-4472 2003-4472 2003-4472 2003-4472	NL,	20011219 < 20011219 < 20011219 < 20011219 < 20011219 < SE, MC, PT, 20030228 < 20030228 < 20030228 < 2003021 < 20030314 < 20030314 < 20030314 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 <	
JP HU NZ ZA	4234435 2004000842 526473 1702920 R: AT, BE, 2003001659 2003001702 2003001702 2003001702 2003001702 2003001702 2003001702 2003001702 2003001408 2003004473 2003004473 2003004472 2003004472 2003004474 2003005609	CH, LT,	B2 A2 A A A A A A A A A A A A A A A A A	20090304 20040728 20050624 20060920 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301 20040301 20040301 20040301 20040301 20050311 20030506 20030606 20040624 20040624 20040624 20040625 20040625 20040625 20040625 20040625	HU NZ EP GB, G CY, A ZA ZA ZA ZA ZA IN NO KR MX ZA	2004-842 2001-526473 2006-11799 R, IT, LT, LU, L TR 2003-1699 2003-1700 2003-1702 2003-1702 2003-1702 2003-1898 2003-RN293 2003-RN293 2003-RN293 2003-4489 2003-44473 2003-44472 2003-4474 2003-5609 2003-4474 2003-5609	NL,	20011219 < 20011219 < 20011219 < 20011219 < SE, MC, PT, 20030228 < 20030228 < 20030228 < 20030228 < 2003021 < 2003021 < 20030314 < 20030314 < 20030319 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 <	
JPHU NZ EP ZA	4234435 2004000842 526473 1702920 R: AT, BE, 1E, SI, 2003001697 2003001700 2003001704 2003001704 2003001199 876069 2003001409 2003004470 2003004472 2003004472 2003004474 2003004474 2003005609 2003005609 2003005609 2003005609	CH, LT,	B2 A2 A A A A A A A A A A A A A A A A A	20090304 20040728 20050624 20060624 20060920 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301 20040301 20040301 20050311 20030503 20050311 20030503 20040624 20040624 20040624 20040624 20040624 20040625 20040625 20040625 20040625 20040625 20040626 20040626 20040626 20040626 20040626	HUNZEP GB, GCY, A ZA Z	2004-842 2001-526473 2006-11799 R, JT, LI, LU, L, TR 2003-1699 2003-1700 2003-1700 2003-1704 2003-1899 2003-1899 2003-2038 2003-2038 2003-4698 2003-4468 2003-4468 2003-4472 2003-4472 2003-4472 2003-4472 2003-4473 2003-4473 2003-4473 2003-4578 2003-4578 2003-6510 2003-6509 2003-6510 2003-6510	NL,	20011219 < 20011219 < 20011219 < 20011219 < 20011219 < SE, MC, PT, 20030228 < 20030228 < 20030228 < 2003021 < 20030314 < 20030314 < 20030314 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 <	
JPHU NZ EP ZA	4234435 2004000812 526473 1702920 R: AT, BE, 2003001659 2003001702 2003001702 2003001702 2003001702 2003001702 2003001702 2003001702 2003001702 2003001702 2003001702 2003001702 2003001702 2003001702 2003001702 2003001470 2003004473 2003004472 2003004472 2003004472 2003004472 2003004472 2003005609 2003005610 20040224944	CH, LT,	B2 A2 A A1 A A A A A A A A A A A A A A A	20090304 20040728 20050624 20060920 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301 20040301 20040301 20040301 20040301 20050311 20030513 20081226 20030606 20040624 20040624 20040624 20040624 20040625 20040625 20040624 20040624 20040624 20040624 20040624 20040624 20040624 20040624 20040624 20040624 20040624 20040624 20040624 20040624 20040624 20040624 20040624	HUU NZZ EP S S S S S S S S S S S S S S S S S S	2004-842 2001-526473 2006-11799 R, IT, LT, LU, L TR 2003-1697 2003-1700 2003-1700 2003-1702 2003-1702 2003-1702 2003-189 2003-189 2003-48293 2003-48293 2003-48293 2003-4459 2003-4472 2003-4472 2003-4472 2003-4472 2003-4472 2003-45260 2003-6260 2003-6260 2003-6260 2003-6260 2003-6260 2003-6260 2003-6260 2003-6260 2003-6260 2003-6260	NL,	20011219 < 20011219 < 20011219 < 20011219 < 20011219 < SE, MC, PT, 20030228 < 20030228 < 20030228 < 2003023 < 20030214 < 20030314 < 20030314 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 200306	
JPHU NZ EP ZA	4234435 2004000842 526473 1702920 R: AT, BE, SI, 2003001697 2003001700 2003001700 2003001704 2003001704 2003001189 876069 2003004479 2003004472 2003004472 2003004472 2003004474 2003005609 2003005609 2003005609 2003005609 2003005610	CH, LT,	B2 A2 A A1 DE, LV, A A A A A A A A A A A A A A A A A A A	20090304 20040728 20050624 20060624 20060920 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301 20040301 20040301 20050311 20030503 20050311 20030503 20040624 20040624 20040624 20040624 20040624 20040625 20040625 20040626 20040626 20040626 20040626 20040626 20040626 20040626 20040626 20040626 20040626 20040626 20040627 20040626 20040627 20040626	HUN NZI NZ	2004-842 2001-526473 2006-11799 R, IT, LI, LU, L, TR 2003-1659 2003-1700 2003-1700 2003-1704 2003-1899 2003-199 2003-203 2003-189 2003-203 2003-4479 2003-4468 2003-4473 2003-4473 2003-4473 2003-4473 2003-4473 2003-4473 2003-4473 2003-459 2003-692 2003-692 2003-692 2003-692 2003-692 2003-692 2003-692 2003-6480	NL,	20011219 < 20011219 < 20011219 < 20011219 < 20011219 < 20011219 < SE, MC, PT, 20030228 < 20030228 < 20030228 < 20030314 < 20030314 < 20030314 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030	
JPHUNZ EP ZA	4234435 2004000842 526473 1702920 R: AT, BE, 2003001699 2003001700 2003001702 2003001702 2003001702 2003001702 2003001702 2003001702 2003001702 2003001702 2003001702 2003001702 2003001702 2003001702 2003001702 200300470 2003004470 2003004472 2003004472 2003004472 2003004474 2003002704 2003005610 20040224944 7008948 20040116454	CH, LT,	B2 A2 A A A A A A A A A A A A A A A A A	20090304 20040728 20050624 20060920 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301 20040301 20040301 20040301 20040301 20050311 20030513 20081226 20030506 20040624 20040624 20040624 20040624 20040624 20040624 20040624 20040624 20040624 20040624 20040624 20040624 20040624 20040624 20040624 20040627 20040627 20040627 20040627 20040627 20040627 20040627 20040627	HUNZE	2004-842 2001-526473 2006-11799 R, IT, LI, LU, L TR 2003-1697 2003-1699 2003-1700 2003-1702 2003-1702 2003-1898 2003-48293 2003-48293 2003-48293 2003-4470 2003-4471 2003-4472 2003-4472 2003-4472 2003-4472 2003-4472 2003-468	NL,	20011219 < 20011219 < 20011219 < 20011219 < 20011219 < SE, MC, PT, 20030228 < 20030228 < 20030228 < 20030210 < 2003010 < 2003014 < 20030314 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 2003060	
JPHUNZ EP ZA	4234435 2004000842 526473 1702920 R: AT, BE, SI, 2003001697 2003001700 2003001700 2003001704 2003001704 2003001189 876069 2003004479 2003004471 2003004471 2003004472 2003004474 2003005609	CH, LT,	B2 A2 A1 DE, LV, A A A A A A A A A A A A A A A A A A A	20090304 20040728 20050624 20060624 20060624 2006020 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301 20040301 20040301 20050311 20030513 20030513 20030513 20040624 20040624 20040624 20040624 20040624 20040625 20030806 20031006 20031006 20031006 20031006 20041111 20060307 20080624 20040617	HUN NZI NZI NZI NZI NZI NZI NZI NZI NZI NZ	2004-842 2001-526473 2006-11799 R, IT, LI, LU, IT, TR 11, LU, 2003-1699 2003-1700 2003-1704 2003-1698 2003-1704 2003-1698 2003-1899 2003-2293 2003-103800 2003-2293 2003-4471 2003-4472 2003-4472 2003-4472 2003-4473 2003-4473 2003-4473 2003-4473 2003-4473 2003-62860 2003-62860 2003-62860 2003-62860 2003-62860 2003-62860	NL,	20011219 < 20011219 < 20011219 < 20011219 < 20011219 < SE, MC, PT, 20030228 < 20030228 < 20030228 < 20030228 < 20030228 < 20030234 < 20030314 < 20030314 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030609 < 20030	

HK 1057890	A1	20051216	uv	2003-108726		20031128	/
US 20040132781	A1	20031210		2003-736426		20031126	
US 7087603	B2	20060808	03	2003-730420		20031213	\
US 20040167141	A1	20040826	TTC	2004-775699		20040210	,
	B2		05	2004-113699		20040210	<
US 7427681 HK 1060347	A1	20080923	1117	2004 101002		20040315	
JP 2005097322	A	20061201		2004-101883		20040315	
US 20070270444	A1	20050414		2004-366925 2006-369220		20060306	
AU 2006201228	A1	20060413		2006-369220		20060306	
AU 2006201229 AU 2006201229	A1 B2	20060413	AU	2006-201229		20060321	<
			2.77	2006-201230		20060221	
AU 2006201230 AU 2006201230	A1 B2	20060413	AU	2000-201230		20060321	\
AU 2006201250 AU 2006201262	A1	20080911 20060427	2.11	2006-201262		20060321	,
AU 2006201262 AU 2006201262	B2	20080904	AU	2006-201262		20060321	<
AU 2006201262 AU 2006201263	A1	20060427	2.11	2006-201263		20060321	,
AU 2006201263	B2	20081030	AU	2006-201263		20060321	<
AU 2006201263	A1	20061030	2.11	2006-201264		20060321	_
AU 2006201264 AU 2006201265	A1	20060427		2006-201264		20060321	
AU 2006201265	B2	20080904	AU	2000-201202		20000321	\
US 20060258658	B2 A1	20080904	He	2006-492450		20060725	/
IN 2007KN02703	A	20080801		2007-KN2703			<
JP 2007KN02703		20080522		2008-15681		20070723	
JP 2008115195 JP 2008189682	A A	20080821		2008-95581		20080123	
JP 2008169662	A	20081030		2008-95584		20080401	
JP 2008220767				2008-97620		20080401	
JP 2008222719 JP 2008189687	A A	20080925 20080821		2008-98506		20080403	
US 2008189687	A1	20080821		2008-109598		20080404	\
JP 2008201808	A	20081120		2008-121723		20080507	
JP 2008247920	A	20080304		2008-121724		20080507	
JP 2008247921	A	20081016		2008-121727		20080507	
AU 2008252044	A1	20090122		2008-252044		20081203	
PRIORITY APPLN. INFO.		20030122		2000-232795P	P	20001205	
INIONIII ALIBN. INIO.	•			2000-257887P	P	20000313	<
				2001-286949P	P	20010427	
				2001-296871		20010914	
				2001-296875		20010914	
				2001-90914	A	20010914	
				2001-90944		20010914	
				2001-91013			<
				2001-94558			<
				2001-96871		20010914	
				2001-96875			<
				2001-971082		20010914	
				2002-526860		20010914	
				2001-952671			<
				2001-953471		20010914	<
				2001-955601		20010914	
				2001-US28803	W		<
				2002-234047			<
				2002-34047			<
			EP	2001-273861	A	20011219	<
			EP	2001-994323			<
			JP	2002-551561	A3	20011219	<
			JP	2002-557938	A3	20011219	<
			JP	2002-559413	A3	20011219	<
			JP	2002-563142	A3	20011219	<
			JP	2002-565976	A3	20011219	<
			JP	2002-567928	A3	20011219	<
			US	2001-26966	A1	20011219	<
			WO	2001-US49139	W	20011219	<
			WO	2001-US50312	W	20011219	<

JP	2002-551562	A3	20011220	<
JP	2002-559414	A3	20011220	<
US	2001-34019	A3	20011220	<
US	2001-34683	A1	20011220	<
IN	2003-KN795	A3	20030619	<
US	2003-624800	A3	20030722	<
US	2004-775699	A1	20040210	
AU	2006-201396	A3	20060404	

OTHER SOURCE(S):

MARPAT 136:247582

Ι

AB Title compds. I [wherein G = Ring C or Ring D; Ring C = (un)substituted Ph, pyridinyl, pyrimidinyl, pyridazinyl, pyrazinyl, or 1,2,4-triazinyl; Ring D = (un)substituted monocyclic or bicyclic ring selected from aryl, heteroaryl, heterocyclyl, or carbocyclyl; Z1 = N or CR9; Z2 = N or CH; Z3 = N or CRx; Z4 = N or CRy; Rx and Ry = independently TR3, or taken together with their intervening atoms form an (un)saturated fused ring having 1-3 ring heteroatoms; R2 and R2a = independently R, TWR6; or C2R2R2a = (un)substituted fused ring containing 0-3 heteroatoms; T = a bond or alkylidene chain; W = C(R6)20, C(R6)2S0-2, C(R6)2NR6, CO, CO2, CR6OCO, CR6OCONR6, C(R6) 2NR6CO, C(R6) 2NR6CO2, CR6:NNR6, CR6:NO, C(R6) 2NR6NR6, C(R6) 2NR6SO2NR6, C(R6) 2NR6CONR6, or CONR6; R = H or (un) substituted aliphatic, (hetero)arvl, or heterocyclyl ring; R3 = R, halo, O, OR, COR, CO2R, COCOR, COCH2COR, NO2, CN, SO0-2R, N(R4)2, CON(R4)2, SO2N(R4)2, OCOR, NR4COR, NR4CO2(aliphatic), NR4N(R4)2, C:NN(R4)2, C:NOR, NR4CO(R4)2, NR4SO2N(R4)2, NR4SO2R, or OCON(R4)2; R4 = R7, COR7, CO2(aliphatic), CON(R7)2, or SO2R7; or N(R4)2 = heterocyclyl or heteroaryl; R6 and R7 = independently H or (un)substituted aliphatic group; or N(R6)2 = heterocyclyl or heteroaryl; or N(R7)2 = heterocyclyl or heteroaryl; R9 = R, halo, OR, COR, CO2R, COCOR, etc.] were prepared as protein kinase inhibitors, especially as

inhibitors of Aurora-2 and GSK-3, for treating diseases such as cancer, diabetes, and Alzheimer's disease. Claims cover (pyrimidinyl)pyrazolamines and indazolamines I [wherein 21 and 22 = N; 23 = CRx; 24 = CRy; G = Ring D]. Examples include data for approx. 300 invention compds. prepared by a variety of synthetic methods and bioassay results for the inhibition of GSK-B3, Aurora-2, ERK, and Src. For instance, the N-(4-pyrimidinyl)-3-pyrazolamine II was prepared and exhibited Ki values of < 0.1 μM for glycogen synthetase kinase 3β

T 404828-10-0P, (5-Methyl-2H-pyrazol-3-yl)(2-pyridin-4-ylquinazolin-4-yl)-amine 404828-11-1P, (7-Chloro-2-pyridin-4-ylquinazolin-4-yl)(5-methyl-2H-pyrazol-3-yl)amine 404828-12-2P, (6-Chloro-2-pyridin-4-ylquinazolin-4-yl)(5-methyl-2H-pyrazol-3-yl)amine 404828-45-1P, (2H-Pyrazol-3-yl)(2-pyridin-4-ylquinazolin-4-yl)amine 404828-50-8P , (5-tert-Butyl-2H-pyrazol3-yl)(2-pyridin-4-ylquinazolin-4-yl)amine RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(protein kinase inhibitor; preparation of heterocyclylpyrazolamines and analogs as protein kinase inhibitors for treatment of cancer, diabetes, and Alzheimer's disease)

RN 404828-10-0 CAPLUS

CN

4-Quinazolinamine, N-(5-methyl-1H-pyrazol-3-yl)-2-(4-pyridinyl)- (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 404828-11-1 CAPLUS

CN 4-Quinazolinamine, 7-chloro-N-(5-methyl-1H-pyrazol-3-yl)-2-(4-pyridinyl)-(CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 404828-12-2 CAPLUS

CN 4-Quinazolinamine, 6-chloro-N-(5-methyl-1H-pyrazol-3-yl)-2-(4-pyridinyl)-(CA INDEX NAME)

RN 404828-45-1 CAPLUS

CN 4-Quinazolinamine, N-1H-pyrazol-3-yl-2-(4-pyridinyl)- (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 404828-50-8 CAPLUS

CN 4-Quinazolinamine, N-[5-(1,1-dimethylethyl)-1H-pyrazol-3-yl]-2-(4-pyridinyl)- (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 12 OF 21 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:220581 CAPLUS

DOCUMENT NUMBER: 136:247581

TITLE: Preparation of pyrazolamines and analogs as protein kinase inhibitors for treatment of cancer, diabetes,

and Alzheimer's disease

INVENTOR(S): Golec, Julian M. C.; Charrier, Jean-Damien; Knegtel, Ronald; Bebbington, David; Davies, Robert; Li, Pan

PATENT ASSIGNEE(S): Vertex Pharmaceuticals Incorporated, USA

SOURCE: PCT Int. Appl., 357 pp.

CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 14 PATENT INFORMATION:

PAT	ENT NO				KIN	D	DATE			APPI	ICAT	ION	NO.		D.	ATE		
	200202 W: #	2260 AE,)5 AG,	AL,	A1 AM,	AT,	2002 AU,	0321 AZ,	BA,	WO 2 BB,	2001- BG,	US28 BR,	793 BY,	BZ,	CA,	0010 CH,	CN.	,
											EE,							
											KG,							
											MW,							
								SI,	SK,	SL,	TJ,	TM,	TR,	TT,	TZ,	UA,	UG,	,
					YU,			0.0		۰.				3 m				
	RW: G										LU,							
C3	E 242237 200109 200300 663892 200300 661377 200300 666073 200300 669645 200300 661067 131744	77	Cr,	CG,	7.1	CPI,	2002	0221	GQ,	0W,	2001	2422	277	SIN,	10,	0010	014	,
AII	200100	226.	7.0		y wr		2002	0321		AII 1	2001-	0267	0		2	0010	914	>==
HS	200103	1551	144		Δ1		2002	0320		HS 3	2001	9535	n 5		2	0010	914	2
IIS	663892	6	, 11		R2		2003	1028		00 2	.001	,,,,,	0.5		-	0010	214	`
IIS	200300	1649	981		A1		2003	0403		IIS 2	2001-	9528	36		2	0010	914	<
US	661377	76	, , ,		B2		2003	0902							_	0010		•
US	200300	649	982		A1		2003	0403		US 2	2001-	9528	75		2	0010	914	<
US	747369	91			B2		2009	0106										
US	200300	736	587		A1		2003	0417		US 2	2001-	9526	71		2	0010	914	<
US	666073	31			B2		2003	1209										
US	200300	783	166		A1		2003	0424		US 2	2001-	9556	01		2	0010	914	<
US	669645	52			B2		2004	0224										
US	200300	833	327		A1		2003	0501		US 2	2001-	9528	33		2	0010	914	<
US	661067	77			B2		2003	0826										
										EP 2	2001-	9730	50		2	0010	914	<
EP	131744				B1		2006											
											IT,	LI,	LU,	NL,	SE,	MC,	PT,	,
							RO,			AL,	TR							
ZA	200300) T / I) T		A		2004	0301		2A 4	2003-	1/01				0010	914	<
ZA	200300) 1 / I	13		A		2004	0302		ZA Z	2003- 2003- 2002-	1/03	F 0		2	0010	914	<
UP	200450	191.	10		2.1		2004	0525		UP 4	2002-	5268 0534	58 71		2	0010	914	<
116	711673) 9 / :	201		NT.		2004	1002		05 4	-1001	9004	/ 1			0010	214	·
110	200500	004	110		7.1		2005	0106		rre 1	2001-	0520	70		2	0010	91/	/
HS	709833	en .	110		B2		2006	0229								0010	<i>J</i> 1 1	-
NZ.	200300 200300 200450 200400 711573 200500 709833 525014	1			A		2005	0930		NZ 2	2001-	5250	14		2	0010	914	<
ES	224277	71			Т3		2005	1116		ES 2	2001-	9710	06		2	0010		
AT	326458	3			T		2006	0615		AT 2	2001-	9709	69		2	0010		
AT	327990)			T		2006	0615		AT 2	2001-	9709	71		2	0010	914	<
AT	327992	2			T		2006	0615		AT 2	2001-	9710	82		2	0010	914	<
AT	327991	l			T		2006	0615		AT 2	2001-	9730	50		2	0010	914	<
AT	525014 224277 326458 327990 327991 326459 169862)			T		2006	0615		AT 2	2001-	9777	79		2	0010		
EP	169862	27			A1		2006	0906		EP 2	2006-	1079	8		2	0010	914	<

```
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
AT 346064 T 20061215 AT 2001-975210
ES 2266258 T3 20070301 ES 2001-970971
ES 2266259 T3 20070301 ES 2001-970971
AT 363284 T 20070615 AT 2001-977783
NZ 545284 A 20070629 NZ 1984-5452
CX 100355750 C 20071219 CX 2001-817427
CA 2432303 A1 20020829 CA 2001-2432303
AU 2002255452 A1 20020904 AU 2002-255452
AU 2002255452 B2 20060608
CA 2432223 A1 20020906 CA 2001-2432223
CA 2432223 C 20080520
CA 2432223 A1 20020906 CA 2001-2432223
CA 2432223 C 20080520
AU 2001297619 A1 20020912 AU 2001-297619
                                  IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                                                                                                                                                                                                                          20010914 <--
                                                                                                                                                                                                                                           20010914 <--
                                                                                                                                                                                                                                           20010914 <--
                                                                                                                                                                                                                                           20010914 <--
                                                                                                                                                                                                                                             20010914 <--
                                                                                                                                                                                                                                            20010914 <--
                                                                                                                                                                                                                                            20011219 <--
                                                                                                                                                                                                                                               20011219 <--
                                                                                                                                                                                                                                               20011219 <--
  CA 2432223 C 20080520 AU 2001-297619
AU 2001297619 AI 20020912 AU 2001-297619
BE 2006608 EP 1345922 AI 20030924 EP 2001-271061
EP 1345922 BI 20060531
                                                                                                                                                                                                                                               20011219 <--
                                                                                                                                                                                                                                               20011219 <--
                   R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
                                 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
  EP 1355905
EP 1355905
                                                                               A1 20031029 EP 2001-273861
                                                                                                                                                                                                                                             20011219 <--
                                                                                                        20070221
                                                                                 B1
                  R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
                                 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, FT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

ZA 2003001697 A 20040301 ZA 2003-1697 20030228 <--
ZA 2003001699 A 20040301 ZA 2003-1699 20030228 <--
ZA 2003001700 A 20040301 ZA 2003-1700 20030228 <--
ZA 2003001702 A 20040301 ZA 2003-1702 20030228 <--
ZA 2003001704 A 20040301 ZA 2003-1704 20030228 <--
ZA 2003001704 A 20040301 ZA 2003-1704 20030228 <--
ZA 2003001704 A 20040301 ZA 2003-1704 20030228 <--
ZA 2003001698 A 20040302 ZA 2003-1704 20030228 <--
ZA 200300468 A 20040624 ZA 2003-4688 20030628 <--
ZA 2003004468 A 20040624 ZA 2003-4468 20030609 <--
ZA 2003004470 A 20040624 ZA 2003-4469 20030609 <--
ZA 2003004471 A 20040624 ZA 2003-4471 20030609 <--
ZA 2003004471 A 20040624 ZA 2003-4471 20030609 <--
ZA 2003004472 A 20040624 ZA 2003-4471 20030609 <--
ZA 2003004472 A 20040624 ZA 2003-4475 20030609 <--
ZA 2003004474 A 20040624 ZA 2003-4475 20030609 <--
ZA 2003004474 A 20040625 ZA 2003-4475 20030609 <--
ZA 2003004474 A 20040625 ZA 2003-4474 20030609 <--
ZA 2003004474 A 20040625 ZA 2003-4474 20030609 <--
ZA 2003004560 A 20030021 NO 2003-2704 20030613 <--
MX 2003005609 A 20031006 MX 2003-2569 20030613 <--
MX 2003005609 A 20031006 MX 2003-5609 20030620 <--
MX 2003005609 A 20030620 MX 2003-5609 20030620 <--
MX 200306509 A 20030620 MX 2003-5609 20030620 <--
MX 200306509 A 20030620 MX 2003-5609 20030620 <--
MX 2
                                 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
```

US 20070270444	7.1	00071100		2006 260220		20060306 <
AU 2006201228	A1 A1	20071122 20060413		2006-369220 2006-201228		20060306 <
	A1					
		20060413	AU	2006-201229		20060321 <
AU 2006201229 AU 2006201230	B2 A1	20081120 20060413	2.11	2006-201230		20060221
	B2		AU	2006-201230		20060321 <
AU 2006201230 AU 2006201262	A1	20080911 20060427	2011	2006-201262		20060321 <
AU 2006201262	B2	20080904	AU	2000-201262		20060321 <
AU 2006201262	A1	20060427	7.11	2006-201263		20060321 <
AU 2006201263	B2	20081030	AU	2000-201203		20000321 <
AU 2006201264	A1	20060427	2.11	2006-201264		20060321 <
AU 2006201265	A1	20060427		2006-201265		20060321 <
AU 2006201265	B2	20080904	110	2000 201203		20000321 (
US 20060258658	A1	20061116	IIS	2006-492450		20060725 <
IN 2007KN02703	A	20080801		2007-KN2703		20070723 <
JP 2008115195	A	20080522		2008-15681		20080125 <
JP 2008189682	A	20080821	JP			20080401 <
JP 2008260767	A	20081030		2008-95584		20080401 <
JP 2008222719	A	20080925	JP			20080403 <
JP 2008189687	A	20080821		2008-98506		20080404 <
US 20080287444	A1	20081120		2008-109598		20080425
JP 2008201808	A	20080904	JP			20080507 <
JP 2008247920	A	20081016	JP			20080507 <
JP 2008247921	A	20081016	JP	2008-121727		20080507 <
AU 2008252044	A1	20090122		2008-252044		20081203 <
PRIORITY APPLN. INFO.:			US	2000-232795P	P	20000915 <
			US	2000-257887P	P	20001221 <
			US	2001-286949P	P	20010427 <
			AU	2001-296871	A3	20010914 <
			AU	2001-296875	A3	20010914 <
			AU	2001-90914	A	20010914 <
			AU	2001-90944	A3	20010914 <
			AU	2001-91013	A3	20010914 <
				2001-94558		20010914 <
				2001-96871		20010914 <
			AU			20010914 <
			EP			20010914 <
				2002-526860		20010914 <
			US			20010914 <
			US			20010914 <
				2001-955601		20010914 <
			WO		W	20010914 <
				2002-234047		
				2002-34047		
			EP EP		A na	20011219 <
			JP			20011219 <
			JP			20011219 <
			JP			20011219 <
			JP			20011219 <
			JP			20011219 <
			JP			20011219 <
			US			20011219 <
				2001-US49139	W	20011219 <
			WO		W	20011219 <
				2002-551562		20011220 <
				2002-559414		20011220 <
			US			20011220 <
			US	2001-34683	A1	20011220 <
			IN	2003-KN795	A3	20030619 <
			US	2003-624800	A3	20030722 <
			US	2004-775699	A1	20040210

MARPAT 136:247581

as

(Uses)

- Title compds. I (wherein G = Ring C or Ring D; Ring C = (un)substituted Ph, pyridinyl, pyrimidinyl, pyridazinyl, pyrazinyl, or 1,2,4-triazinyl; Ring D = (un)substituted monocyclic or bicyclic ring selected from aryl, heteroaryl, heterocyclyl, or carbocyclyl; Z1 = N or CR9; Z2 = N or CH; Z3 = N or CRx; Z4 = N or CRy; Rx and Ry = independently TR3, or taken together with their intervening atoms form an (un)saturated fused ring having 1-3 ring heteroatoms; R2 and R2a = independently R, TWR6; or C2R2R2a = (un) substituted fused ring containing 0-3 heteroatoms; T = a bond or alkylidene chain; W = C(R6)20, C(R6)2S0-2, C(R6)2NR6, CO, CO2, CR6OCO, CR6OCONR6, C(R6)2NR6CO, C(R6)2NR6CO2, CR6:NNR6, CR6:NO, C(R6)2NR6NR6, C(R6) 2NR6SO2NR6, C(R6) 2NR6CONR6, or CONR6; R = H or (un) substituted aliphatic, (hetero)aryl, or heterocyclyl ring, R3 = R, halo, O, OR, COR, CO2R, COCOR, COCH2COR, NO2, CN, SO0-2R, N(R4)2, CON(R4)2, SO2N(R4)2, OCOR, NR4COR, NR4CO2(aliphatic), NR4N(R4)2, C:NN(R4)2, C:NOR, NR4CO(R4)2, NR4SO2N(R4)2, NR4SO2R, or OCON(R4)2; R4 = R7, COR7, CO2(aliphatic), CON(R7)2, or SO2R7; or N(R4)2 = heterocyclyl or heteroaryl; R6 and R7 = independently H or (un)substituted aliphatic group; or N(R6)2 = heterocyclyl or heteroarvl; or N(R7)2 = heterocyclyl or heteroarvl; R9 = R, halo, OR, COR, CO2R, COCOR, etc. | were prepared as protein kinase inhibitors, especially
 - inhibitors of Aurora-2 and GSK-3, for treating diseases such as cancer, diabetes, and Alzheimer's disease. Claims cover pyrazolamines and indazolamines I [wherein Z1 = N or CR9; Z2 = N or CH; Z3 = N or CRx; Z4 = N; at least one of Z1 or Z3 = N]. Examples include data for approx. 300 invention compds. prepared by a variety of synthetic methods and bioassay results for the inhibition of GSK-β3, Aurora-2, ERK, and Src. For instance, the N-(4-pyrimidiny1)-3-pyrazolamine II was prepared and exhibited Ki values of < 0.1 μM for glycogen synthetase kinase 3β (GSK-3β) and 0.1-1.0 μM for Aurora-2.
- 404828-10-0P, (5-Methyl-2H-pyrazol-3-yl)(2-pyridin-4-ylquinazolin-4-v1)-amine 404828-11-1P, (7-Chloro-2-pyridin-4-ylquinazolin-4-yl) (5-methyl-2H-pyrazol-3-yl) amine 404828-12-2P, (6-Chloro-2-pyridin-4-ylquinazolin-4-yl) (5-methyl-2Hpyrazol-3-yl)amine 404828-45-1P, (2H-Pyrazo1-3-y1)(2-pyridin-4-ylquinazolin-4-yl)amine 404828-50-8P , (5-tert-Buty1-2H-pyrazo1-3-y1)(2-pyridin-4-y1quinazolin-4-y1)amine RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(protein kinase inhibitor; preparation of heterocyclylpyrazolamines and analogs as protein kinase inhibitors for treatment of cancer, diabetes, and Alzheimer's disease)

RN 404828-10-0 CAPLUS

CN 4-Quinazolinamine, N-(5-methyl-1H-pyrazol-3-yl)-2-(4-pyridinyl)- (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 404828-11-1 CAPLUS

CN 4-Quinazolinamine, 7-chloro-N-(5-methyl-1H-pyrazol-3-yl)-2-(4-pyridinyl)-(CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 404828-12-2 CAPLUS

CN 4-Quinazolinamine, 6-chloro-N-(5-methyl-1H-pyrazol-3-yl)-2-(4-pyridinyl)-(CA INDEX NAME)

RN 404828-45-1 CAPLUS

CN 4-Quinazolinamine, N-1H-pyrazol-3-yl-2-(4-pyridinyl)- (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 404828-50-8 CAPLUS

CN 4-Quinazolinamine, N-[5-(1,1-dimethylethyl)-1H-pyrazol-3-yl]-2-(4-pyridinyl)- (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 13 OF 21 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:220580 CAPLUS

DOCUMENT NUMBER: 136:247606

TITLE: Preparation of 3-(4-pyrimidinylamino)pyrazole derivatives as protein kinase inhibitors, especially of Aurora-2 and GSK-3, for treating cancer, diabetes

and Alzheimer's disease.

INVENTOR(S): Davies, Robert; Bebbington, David; Binch, Halev;

Knegtel, Ronald; Golec, Julian M. C.; Patel, Sanjay; Charrier, Jean-Damien; Kay, David; Davies, Robert

PATENT ASSIGNEE(S): Vertex Pharmaceuticals Incorporated, USA

SOURCE: PCT Int. Appl., 357 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY	ACC.	NUM.	COU
PATENT	INFO	RMATI	ON:

PA	ENT	NO.			KIN	D	DATE			APP	LICAT	ION	NO.		D	ATE		
	2002 W:	0226 AE, CO, GM, LS, PT,	AG, CR, HR, LT, RO,	AL, CU, HU, LU, RU,	A1 AM, CZ, ID, LV,	AT, DE, IL, MA, SE,	AU, DK, IN, MD, SG,	0321 AZ, DM, IS, MG,	BA, DZ, JP, MK,	WO BB EC KE MN	2001- , BG, , EE, , KG, , MW, , TJ,	US28 BR, ES, KP, MX,	792 BY, FI, KR, MZ,	BZ, GB, KZ, NO,	CA, GD, LC, NZ,	OO10 CH, GE, LK, PH,	914 CN, GH, LR, PL,	
		DE,	DK,	ES,	FI,	FR,	GB,	GR,	IE,	ΙT	, TZ, , LU,	MC,	NL,	PT,	SE,	TR,	BF,	
CA	2422	371			A1		2002	0321		CA	2001-	2422	371		2	0010	914	<
AU	2001	0945	58		A		2002	0326		AU	2001-	9455	8		2	0010	914	<
US	2003	0055	044		A1		2003	0320		US	2001-	9535	05		2	0010	914	<
US	6638	926			B2		2003	1028										
US	2003	0064	981		A1		2003	0403		US	2001-	9528	36		2	0010	914	<
US	6613	776			B2		2003	0902							_			
US	2003	0064	982		A1		2003	0403		US	2001-	9528	75		2	0010	914	<
US	74/3	691			B2		2009	0106			0000	0.506	7.0			0010		
US	2003	721	68/		AI		2003	1200		05	2001-	9526	/1		2	0010	914	<
US	2002	/31	100		3.1		2003	1209		TTC	2001	O E E C	0.1		2	0010	014	,
115	6696	452	100		B2		2003	0924		0.5	2001-	2336	01			0010	214	\
IIS	2003	0083	327		Δ1		2003	0501		TIS	2001-	9528	33		2	0010	914	<
IIS	6610	677	J		B2		2003	0826		00	2001	JJ20	-		-	0010	J 1 4	•
EP	1317	450			A1		2003	0611		EP	, ML, 2001- 2001- 2001- 2001- 2001- 2001- 2001- 2001- 2001-	9752	10		2	0010	914	<
EP	1317	450			B1		2006											
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	, IT,	LI,	LU,	NL,	SE,	MC,	PT,	
		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	ΑL	, TR							
HU	2003	0021	72		A2		2003	0929		HU	2003- 2003-	2172			2	0010	914	<
ZA	2003	0017	01		A		2004	0301		ZA	2003-	1701			2	0010	914	<
ZA	2003	0017	03		A		2004	0302		ZA	2003-	1703			2	0010	914	<
JP	2004	5122	77		T		2004	0422		JP	2002-	5268	57		2	0010	914	<
JP	4105	948			B2		2008	0625										
US	2004	0097	501		A1		2004	0520		US	2003- 2003- 2003- 2003- 2002-	9534	/1		2	0010	914	<
US	7115 2005	/39	110		B2		2006	1002										
US	7098	220	110		B2		2005			US	2001-	9528	/8		2	0010	914	<
NZ	6250	330			BZ		2006	0629		MZ	2001	6260	00		2	0010	014	
DC.	22/12	771			T 3		2005	1116		EC.	2001- 2001-	9230	05		2	0010	01/	Z
AT	3264	58			Т		2005	0615		AT	2001- 2001- 2001- 2001-	9700	69		2	0010		
AT	3279	90			T		2006	0615		AT	2001-	9709	71		2	0010		
***	52.5	- 0			-		-000										- 4 2	

AT	327992		т	20060615	A	T 20	001-	97108	32		2	0010	914	<
	327991		Ť	20060616	7	T 20	001	07201	. 0		2	0010	21.4	Ĵ
	327771			20000013	n	T 20	01-	9/30.	10		2	0010	714	
	326459		T	20060615 20060615 20060615 20060906	A	T ZU	101-	9///	19		21	1010	114	<
EP	1698627		A1	20060906	E	P 20	006-	10798	3		2	0010	114	<
	R: AT, BE,	CH,	DE,	DK, ES, FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
	IE, SI,	LT,	LV,	FI, RO, MK,	CY,	AL,	TR							
AT	346064		т	20061215	A	T 20	01-	97521	LO		2	0010	914	<
ES	2266258		тa	20070301	E	S 20	001-	97091	71		2	0010	914	<
FC	2266250		Т3	20070301	-	e 20	01-	27100	22		2	0010	21/	2
100	26200233		13	20070301		D 20	01-	27100	2		2	2010	211	
AI	363284		1	20070615	A	1 20	101-	91118	33		2	0010	914	<
NZ	545284		A	200/0629	N	Z 19	984-	5452			21	0010	914	<
CN	100355750		С	20071219	C	N 20	01-	81742	27		2	0010	914	<
CA	2432303		A1	20020829	C	A 20	01-	24323	303		2	0011	219	<
AU	2002255452		A1	20020904	A	U 20	002-	25545	52		2	0011	219	<
AU	2002255452		B2	20060608										
CA	2432223		A 1	20020906	C	A 20	001-	24322	223		2	0011	219	<
077	2/22222		-	20020500							_			•
211	2432223		3.1	200000320				2026			2		220	
AU	2001297619		AI	20020912	A	0 20	JUI-	29/6	19		2	JULT.	219	<
ΑU	2001297619		B2	20060608										
EP	1345922		A1	20030924	E	P 20	01-	27106	51		2	0011	219	<
EP	R: A1, B2, A1, A1, A1, A1, A1, A1, A1, A1, A1, A1		B1	20060531										
	R: AT, BE,	CH,	DE.	DK, ES, FR,	GB,	GR,	IT.	LI.	LU.	NL.	SE,	MC.	PT.	
	IE. SI.	LT.	LV.	FI, RO, MK,	CY.	AL.	TR							
EP	1355905	,	A 1	FI, RO, MK, 20031029 20070221	, E	P 20	101-	27386	51		2	0011	219	<
FD	1355905 1355905		В1	20070221	_	(, , , ,	_ , 500	, -		_	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		•
EF														
	R: AI, BE,	CH,	DE,	DK, ES, FR,	GB,	GK,	11,	ът,	LU,	NL,	SE,	MC,	ы,	
	1E, S1,	LT,	LV,	FI, RO, MK,	CY,	AL,	TR							
NZ	526472		A	20040430	N	Z 20	01-	5264	72		2	0011	219	<
JΡ	2004518743		T	20040624	J	P 20	002-	56591	76		2	0011	219	<
JΡ	2004519479		T	20040702	.т	D 20	102-	56792	28		2	0011	219	<
JP	4234435		B2	20090304		F 2(,02 .							
JP HII	4234435		B2 A2	20090304	н	F 20	004-	842			2	0011	219	<
JP HU N7	4234435 2004000842 526473		B2 A2	20090304 20040728 20050624	Н	U 20	004-	842	73		2	0011	219	<
JP HU NZ	4234435 2004000842 526473		B2 A2 A	20090304 20040728 20050624	H	U 20 Z 20	004-	842 5264	73		21	0011	219	<
JP HU NZ EP	1E, S1, 526472 2004518743 2004519479 4234435 2004000842 526473 1702920	011	B2 A2 A A1	20090304 20040728 20050624 20060920	H N E	U 20 Z 20 P 20	004-	842 5264 11799	73		2 2	0011	219 219 219	< <
JP HU NZ EP	4234435 2004000842 526473 1702920 R: AT, BE,	CH,	B2 A2 A A1 DE,	20090304 20040728 20050624 20060920 DK, ES, FR,	H N E GB,	U 20 Z 20 P 20 GR,	004- 001- 006- IT,	842 5264 11799 LI,	73 LU,	NL,	2 2 2 SE,	0011 0011 0011 MC,	219 219 219 219 PT,	< <
JP HU NZ EP	4234435 2004000842 526473 1702920 R: AT, BE, IE, SI,	CH, LT,	B2 A2 A A1 DE, LV,	20090304 20040728 20050624 20060920 DK, ES, FR, FI, RO, MK,	H N E GB, CY,	U 20 Z 20 P 20 GR,	004- 001- 006- IT,	842 5264 11799 LI,	73 LU,	NL,	2 2 SE,	0011 0011 0011 MC,	219 219 219 PT,	< <
JP HU NZ EP	4234435 2004000842 526473 1702920 R: AT, BE, IE, SI, 2003001697	CH, LT,	B2 A2 A A1 DE, LV, A	20090304 20040728 20050624 20060920 DK, ES, FR, FI, RO, MK, 20040301	H N E GB, CY,	U 20 Z 20 P 20 GR, AL,	004- 001- 006- IT, TR	842 5264 11799 LI,	73 LU,	NL,	2 2 2 SE,	0011: 0011: 0011: MC,	219 219 219 219 PT,	< < <
JP HU NZ EP ZA ZA	4234435 2004000842 526473 1702920 R: AT, BE, IE, SI, 2003001697 2003001699	CH, LT,	B2 A2 A A1 DE, LV, A	20090304 20040728 20050624 20060920 DK, ES, FR, FI, RO, MK, 20040301 20040301	H N E GB, CY,	U 20 Z 20 P 20 GR, AL, A 20 A 20	004- 001- 006- IT, TR	842 5264 11799 LI, 1697	73 LU,	NL,	2 2 SE,	0011 0011 0011 MC,	219 219 219 PT, 228 228	< < <
JP HU NZ EP ZA ZA ZA	4234435 2004000842 526473 1702920 R: AT, BE, IE, SI, 2003001697 2003001699 2003001700	CH, LT,	B2 A2 A A1 DE, LV, A A	20090304 20040728 20050624 20060920 DK, ES, FR, FI, RO, MK, 20040301 20040301	H N E GB, CY, Z	U 20 Z 20 P 20 GR, AL, A 20 A 20 A 20	004- 001- 006- IT, TR 003- 003-	842 5264 11799 LI, 1697 1699	73) LU,	NL,	21 21 SE, 21	0011: 0011: 0011: MC, 0030:	219 219 219 PT, 228 228 228	< < <
JP HU NZ EP ZA ZA ZA ZA	4234435 2004000842 526473 1702920 R: AT, BE, IE, SI, 2003001697 2003001700 2003001700	CH, LT,	B2 A2 A A1 DE, LV, A A	20090304 20040728 20050624 20060920 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301	H N E GB, CY, Z Z	U 20 Z 20 P 20 GR, AL, A 20 A 20 A 20 A 20	004- 001- 006- IT, TR 003- 003-	842 5264 11799 LI, 1697 1699 1700	73) LU,	NL,	21 21 SE, 21 21 21	0011: 0011: 0011: MC, 0030: 0030:	219 219 219 PT, 228 228 228 228	< < < <
JP HU NZ EP ZA ZA ZA ZA	4234435 2004000842 526473 1702920 R: AT, BE, IE, SI, 2003001697 2003001700 2003001700 2003001700 2003001700	CH, LT,	B2 A2 A A1 DE, LV, A A A	20090304 20040728 20050624 20060920 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301 20040301	H N E GB, CY, Z Z Z Z	U 20 Z 20 P 20 GR, AL, A 20 A 20 A 20 A 20 A 20	004- 001- 006- IT, TR 003- 003- 003-	842 5264 11799 LI, 1697 1699 1700 1702	73) LU,	NL,	21 21 SE, 21 21 21 21	0011: 0011: 0011: 0030: 0030: 0030: 0030:	219 219 219 PT, 228 228 228 228	< < < < <
JP HU NZ EP ZA ZA ZA ZA ZA	4234435 2004000842 526473 1702920 R: AT, BE, IE, SI, 2003001697 2003001700 2003001700 2003001704	CH, LT,	B2 A2 A A1 DE, LV, A A A A	20090304 20040728 20050624 20060920 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301 20040301 20040301	H N E GB, CY, Z Z Z Z Z	U 20 Z 20 GR, AL, A 20 A 20 A 20 A 20 A 20	004- 001- 006- IT, TR 003- 003- 003-	842 5264 11799 LI, 1697 1699 1700 1702	73 LU,	NL,	21 22 SE, 21 21 21 21	0011: 0011: 0011: 0030: 0030: 0030: 0030:	219 219 219 PT, 228 228 228 228 228	< < < < < < < < < <
JP HU NZ EP ZA ZA ZA ZA ZA	4234435 2004000842 526473 1702920 R: AT, BE, 2003001697 2003001697 2003001700 2003001704 2003001704 2003001698	CH, LT,	B2 A2 A A1 DE, LV, A A A A	20090304 20040728 20050624 20060920 DK, ES, FR, 20040301 20040301 20040301 20040301 20040301 20040302	H N E GB, CY, Z Z Z Z Z	U 20 Z 20 GR, AL, A 20 A 20 A 20 A 20 A 20	004-: 001-: 006-: IT, TR 003-: 003-: 003-:	842 5264 11799 LI, 1697 1699 1700 1702 1704 1698	73 LU,	NL,	21 21 SE, 21 21 21 21 21 21 21 21	0011: 0011: 0011: 0030: 0030: 0030: 0030: 0030:	219 219 219 PT, 228 228 228 228 228 228	< < < < < < < < < <-
JP HU NZ EP ZA ZA ZA ZA ZA IN	4234435 200400842 526473 1702920 R: AT, BE, IE, SI, 2003001697 2003001700 2003001700 2003001704 2003001698 2003KN00289 2003KN00289	CH, LT,	B2 A2 A A1 DE, LV, A A A A	20090304 20040728 20090624 20060920 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301 20040301 20040301 20040302	H N E GB, CY, Z Z Z Z Z	U 20 Z 20 P 20 GR, AL, A 20 A 20 A 20 A 20 A 20	004-: 001-: 006-: IT, TR 003-: 003-: 003-: 003-:	842 5264 11799 LI, 1697 1699 1700 1702 1704 1698 KN289	73 LU,	NL,	21 21 SE, 21 21 21 21 21 21 21	0011: 0011: 0011: 0030: 0030: 0030: 0030: 0030: 0030:	219 219 219 PT, 228 228 228 228 228 228	< < < < < < < < < <-
JP HU NZ EP ZA ZA ZA ZA ZA IN NO	4234435 2004000842 526473 1702920 R: AT, BE, 2003001697 2003001700 2003001700 2003001704 2003001698 20038001704 2003001698 20038010289	CH, LT,	B2 A2 A1 DE, LV, A A A A A	20090304 20040728 20090624 20060920 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301 20040301 20040301 20040301	H N E GB, CY, Z Z Z Z Z Z Z I N	U 20 Z 20 P 20 GR, AL, A 20 A 20 A 20 A 20 A 20 A 20 A 20 A 20	004- 001- 006- IT, TR 003- 003- 003- 003- 003-	842 5264 11799 LI, 1697 1700 1702 1704 1698 KN289	73) LU,	NL,	21 21 SE, 21 21 21 21 21 21	0011: 0011: 0011: 0030: 0030: 0030: 0030: 0030: 0030: 0030:	219 219 219 PT, 228 228 228 228 228 228 228 307	< < < < < < < < < <-
JP HU NZ EP ZA ZA ZA ZA ZA IN NO MX	4234435 2004000842 526473 1702920 R: AT, BE, IE, SI, 2003001697 2003001700 2003001700 2003001704 2003001709 2003001709 2003001709 2003001709 2003001709 2003001709 200300190	CH, LT,	B2 A2 A1 DE, LV, A A A A A A	20090304 20040728 20050624 20060920 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301 20040301 20040301 20040301 20030513 20030606	H N E GB, CY, Z Z Z Z Z Z I N	U 20 Z 20 P 20 GR, AL, A 20 A 20 A 20 A 20 O 20 X 20	004- 001- 006- IT, TR 003- 003- 003- 003- 003-	842 5264 11799 LI, 1697 1700 1702 1704 1698 KN289 1190 2292	73) LU,	NL,	21 21 SE, 21 21 21 21 21 21 21	0011: 0011: 0011: 0030: 0030: 0030: 0030: 0030: 0030: 0030:	219 219 219 PT, 228 228 228 228 228 228 228 307 314	< < < < < < < < < <-
JP HU NZ EP ZA ZA ZA ZA ZA IN NO MX ZA	4234435 2004000842 526473 1702920 R: AT, BE, SI, 2003001697 2003001702 2003001702 2003001702 2003001702 2003001702 2003001902 2003001902 2003001902 2003001902	CH, LT,	B2 A2 A A1 DE, LV, A A A A A A A A	20090304 20040728 20050624 20060920 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301 20040301 20040301 20040301 20040301 20050311 20030513 20030606	H N E GB, CY, Z Z Z Z Z Z I N M	U 20 Z 20 P 20 GR, AL, A 20 A 20 A 20 A 20 O 20 X 20 A 20	004-: 001-: 006-: IT, TR 003-: 003-: 003-: 003-: 003-: 003-:	842 5264 11799 LI, 1697 1700 1702 1704 1698 KN289 1190 2292	73 LU,	NL,	21 21 21 21 21 21 21 21 21 21 21 21 21 2	0011: 0011: 0011: 0030: 0030: 0030: 0030: 0030: 0030: 0030: 0030: 0030: 0030:	219 219 219 PT, 228 228 228 228 228 228 307 314 317 509	< < < < < < < <
JP HU NZ EP ZA ZA ZA ZA ZA IN NO MX ZA ZA	4234435 2004000842 526473 1702920 R: AT, BE, 103001697 2003001697 2003001700 2003001702 2003001702 2003001702 2003001702 2003001702 2003001598 2003KN00289 2003K00289 2003004469	CH, LT,	B2 A2 A A1 DE, LV, A A A A A A A A	20090304 20040728 20050624 20060920 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301 20040301 20040303 20090331 20030513 20030513 20040624 20040624	H N E GB, CY, Z Z Z Z Z Z Z I N M Z Z	U 20 Z 20 P 20 GR, AL, A 20 A 20 A 20 A 20 A 20 A 20 A 20 A 20	004-: 001-: 006-: IT, TR 003-: 003-: 003-: 003-: 003-: 003-:	842 5264 11799 LI, 1697 1700 1702 1704 1698 KN289 1190 2292 4468 4469	73) LU,	NL,	21 22 21 22 21 21 22 22 22 22 22 22 22 2	0011: 0011: 0030: 0030: 0030: 0030: 0030: 0030: 0030: 0030: 0030: 0030: 0030:	219 219 219 PT, 228 228 228 228 228 228 307 314 317 609	< < < < < < < <
JP HU NZ EP ZA ZA ZA ZA IN NO MX ZA ZA ZA ZA	4234435 2004000842 526473 R: AT, BE, IE, SI, 2003001697 2003001700 2003001700 2003001704 2003001704 2003001992 2003001992 2003001992 2003001998 2003001998 200300468 2003004468	CH, LT,	B2 A2 A A1 DE, LV, A A A A A A A A	20090304 20040728 20050624 20060920 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301 20040301 20040301 20040302 20050311 20030513 20030506 20040624 20040624	H N E GB, CY, Z Z Z Z Z Z I I N M Z Z	U 20 Z 20 P 20 GR, AL, A 20 A 20 A 20 A 20 A 20 A 20 A 20 A 20	004-: 001-: 003-: 003-: 003-: 003-: 003-: 003-: 003-: 003-: 003-: 003-: 003-: 003-: 003-:	842 5264 11799 LI, 1697 1700 1702 1704 1698 11992 24468 4469 4470	73 LU,	NL,	21 22 21 21 21 21 21 22 21 22 21 22 21 22 22	0011: 0011: 0030: 0030: 0030: 0030: 0030: 0030: 0030: 0030: 0030: 0030:	219 219 219 219 228 228 228 228 228 228 314 317 317 509 509	< < < < < < < < < <-
JP HU NZ EP ZA ZA ZA ZA IN NO MX ZA ZA ZA ZA ZA	4234435 2004000842 526473 1702920 R: AT, BE, IE, SI, 2003001697 2003001700 2003001700 2003001704 2003001704 2003001992 2003001902 2003002292 2003004469 20030004471	CH, LT,	B2 A2 A A1 DE, LV, A A A A A A A A	20090304 20040728 20050624 20060920 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301 20040301 20040302 20050311 20030606 20040624 20040624 20040624	H N E GB, CY, Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	U 20 ZZ 20 GR, AL, A 20 A	004- 001- 006- 1T, TR 003- 003	842 5264 11799 LI, 1697 1700 1702 1704 1698 KN289 1190 24468 4469 4470 4471	73 LU,	NL,	21 22 21 21 21 21 21 21 21 21 21 21 21 2	0011: 0011: 0011: 0030: 0030: 0030: 0030: 0030: 0030: 0030: 0030: 0030: 0030: 0030: 0030: 0030:	219 219 219 PT, 228 228 228 228 228 228 314 317 509 509 509	< < < < < < < < < <-
JP HU NZ EP ZA ZA ZA ZA ZA IN NO MX ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA	4234435 2004000842 526473 1702920 R: AT, BE, 1E, SI, 2003001697 2003001700 2003001700 2003001704 2003001702 2003001992 2003001992 2003001992 2003001992 2003004492 2003004473	CH, LT,	B2 A2 A1 DE, LV, A A A A A A A A	20090304 20040728 20050624 20050622 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301 20040301 20040301 20040301 20040302 20050311 20030513 20030506 20040624 20040624 20040624	H N E GB, CY, Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	U 20 ZZ 20 GR, AAL, AA 20 AA 20	004- 001- 006- IT, TR 003- 003	842 5264 11799 LI, 1697 1700 1702 1704 1698 KN289 1190 2292 4468 4469 4470 4471	773) LU,	NL,	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	00111 MC, 0030: 0030	219 219 219 PT, 228 228 228 228 228 307 314 317 609 609 609	< < < < < < < < < <-
JP HU NZ EP ZA ZA ZA ZA ZA IN NO MX ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA	4234435 2004000842 526473 1702920 R: AT, BR, 1E, SI, 2003001697 2003001700 2003001700 2003001704 2003001704 2003001698 200300192 200300192 2003004469 2003004471 20030004471	CH, LT,	B2 A2 A1 DE, LV, A A A A A A A A	20990304 20040728 20050624 20060920 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301 20040301 20040302 20050311 20030513 20030513 20030606 20040624 20040624 20040624 20040624 20040624	H N E GB, CY, Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	U 20 20 20 20 20 20 20 20 20 20 20 20 20	004-0001-0006-0003-0003-0003-0003-0003-0003	842 5264 11799 LI, 1697 1700 1702 1704 1698 KN288 1190 2292 4468 4469 4470 4471 4475	773 } LU,	NL,	2' 2' 2' 2' 2' 2' 2' 2' 2' 2' 2' 2' 2' 2	00111 MC, 0030	219 219 219 PT, 228 228 228 228 228 307 314 317 609 609 609	< < < < < < < <
JP HU NZ EP ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA	4234435 2004000842 526473 1702920 R: AT, BE, 11, 511, 2003001697 2003001700 2003001700 2003001704 2003001704 200300199 200300199 200300199 200300199 200300199 2003004470 2003004473 2003004473	CH, LT,	B2 A2 A A1 DE, LV, A A A A A A A A A A A A A A A A A A A	20090304 20040728 20050624 20050920 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301 20040301 20040301 20040302 20050311 20030513 20030503 20040624 20040624 20040624 20040624 20040624	H N E GB, CY, Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	U 20 20 20 20 20 20 20 20 20 20 20 20 20	004- 001- 1T, TR 003- 003	842 5264' 11799 LI, 1697 1700 1702 1704 1698 KN288' 4469 4470 4471 4473	773 } LU,	NL,	2' 2' 2' 2' 2' 2' 2' 2' 2' 2' 2' 2' 2' 2	00111 MC, 0030	219 219 219 PT, 228 228 228 228 228 307 314 317 609 609 609	< < < < < < < <
JP HU NZ ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA	4234435 2004000842 526473 1702920 R: AT, BR, 2003001697 2003001700 2003001704 2003001704 2003001704 2003001705 2003001704 2003001905 2003001905 2003001905 2003004471 2003004471 2003004475	CH, LT,	B2 A2 A A1 DE, LV, A A A A A A A A A A A A A A A A A A A	20990304 20040728 20050624 20060920 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301 20040301 20040301 20040302 20050311 20030513 20030606 20040624 20040624 20040624 20040624	H N E GB, CY, Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	U 20 20 20 20 20 20 20 20 20 20 20 20 20	004= 11, TR 003- 003	842 5264' 11792 LI, 1697 1700 1702 1704 1698 KN289 1190 2292 4468 4469 4471 4473 4475	773) LU,	NL,	2' 2' 2' 2' 2' 2' 2' 2' 2' 2' 2' 2' 2' 2	00111 00111 MC, 00300 00300 00300 00300 00300 00300 00300 00300 00300 00300 00300 00300 00300 00300	219 219 219 PT, 228 228 228 228 228 307 3114 317 509 509 509 509	< < < < < < < <
JP HU NZ EP ZA	4234435 2004000842 526473 R: AT, BE, 116, SI1, 2003001697 2003001700 2003001700 2003001704 2003001709 200300199 200300199 200300199 200300199 200300199 200300199 2003004473 2003004473	CH, LT,	B2 A2 A1 DE, LV, AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	20090304 20040728 20050624 20050920 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301 20040301 20040301 20040301 20040301 20040301 20040301 20040301 20040301 20040304 20040624 20040624 20040624 20040624 20040624 20040624	H NN E GB, CY, Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	U 20 20 20 20 20 20 20 20 20 20 20 20 20	004= 001- 1T, TR 003- 003	842 5264 11799 LI, 1697 1699 1700 1702 1704 1698 KN288 14469 44470 4473 4473 4473 4473	773) LU,	NL,	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	00111 MC, 0030	219 219 219 PT, 228 228 228 228 228 228 307 3114 317 609 609 609 609	< < < < < < < <
JP HU NZ EP ZA ZA ZA ZA IN NO XZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA	4234435 2004000842 526473 1702920 R: AT, BR, 2003001697 2003001700 2003001704 2003001704 2003001704 2003001598 200300199 200300199 200300199 200300292 2003004478 2003004471 2003004472 2003004472	CH, LT,	B2 A2 A1 DE, AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	20990304 20040728 20050624 20060920 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301 20040301 20040301 20040302 20050311 20030513 20030606 20040624 20040624 20040624 20040624 20040625 20040624 20040625 20040625	H H N E E GB, CY, Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	U 20 20 20 20 20 20 20 20 20 20 20 20 20	004- 006- IT, TR 003- 003	842 5264 11799 LI, 1697 1700 1700 1702 1704 1698 KN285 1190 4470 4471 4473 4473 4474 4474 4474	773) LU,	NL,	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	00111 00111 MC, 003000 00300 00300 00300 00300 00300 00300 00300 00300 003000 00300 00300 00300 00300 00300 00300 00300 00300 003000 00300 00300 00300 00300 00300 00300 00300 00300 003000 00300 00300 00300 00300 00300 00300 00300 00300 003000 00300 00300 00300 00300 00300 00300 00300 00300 003000 00300 00300 00300 00300 00300 00300 00300 00300 003000 00300 00300 00300 00300 00300 00300 00300 00300 0030	219 219 219 PT, 228 228 228 228 228 307 314 317 509 509 509 509 509 509 509	< < < < < < < <
JP HU NZ ZA ZA ZA ZA ZA IN NO XZ ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA	4234435 2004000842 526473 1702920 R: AT, BE,	CH, LT,	B2 A2 A1 DE, LV, AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	20090304 20090304 20040728 20050624 20060920 DK, ES, FR, FI, RO, MK, 10040301 20040301 20040301 20040301 20040301 20040301 20040301 20040301 20040302 20050311 20030513 20030503 20040624 20040624 20040624 20040625 20040625 20040625 20040625 20040625 20040625 20040625 20040625 20040625 20040625 20040625 20040625	H H N E E E E E E E E E E E E E E E E E	U 20 20 20 20 20 20 20 20 20 20 20 20 20	004- 001- 117, TR 003- 00	842 5264 11799 11799 1700 1702 1704 1698 1190 2292 4468 4479 4471 4473 4475 4472 4474 6660	73) LU,	NL,	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	00111. 00111. MC, 00300. 0	219 219 219 PT, 228 228 228 228 307 314 317 509 509 509 509 509 509 509 509 509 509	
JP HU NZ ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA	4234435 2004000842 526473 1702920 R: AT, BR, 2003001697 2003001700 2003001704 2003001704 2003001704 2003001704 2003001475 2003004471 2003004472 2003004472 2003004474 2003005609	CH, LT,	B2 A2 A A1 DE, LV, A A A A A A A A A A A A A A A A A A A	20990304 20040728 20050624 20060920 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301 20040301 20040301 20040302 20050311 20030513 20030606 20040624 20040624 20040624 20040625 20040625 20040625 20040625 20040626 20040626	H H H H H H H H H H H H H H H H H H H	U 20 20 20 20 20 20 20 20 20 20 20 20 20	004- 001- 117, TR 003- 00	842 5264 11793 LI, 1697 1700 1702 1704 1698 8KN289 4470 2292 4468 4471 4473 4473 4474 4474 4474 4474 4474	73) LU,	NL,	22 22 22 22 22 22 22 22 22 22 22 22 22	00111. MC, 0030. 003	219 219 219 PT, 228 228 228 228 228 3314 3317 509 509 509 509 509 509 509 509 509 509	
JP HU NZ ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA	4234435 2004000842 526473 1702920 R: AT, BE,	CH, LT,	B2 A2 A1 DE, LV, AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	20090304 20040728 20050624 20060920 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301 20040301 20040301 20040301 20040301 20040302 20050311 20030513 20030506 20040624 20040624 20040624 20040624 20040625 20040624	H H H H H H H H H H H H H H H H H H H	U 20 20 20 20 20 20 20 20 20 20 20 20 20	004- 001- 006- TR 003- 00	842 11799 LI, 1697 1700 1702 1704 1698 KN288 KN288 KN289 4470 4471 4473 4475 4474 4474 6609 66248	73) LU,	NL,	22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	00111. MC, 0030. 003	219 219 219 PT, 228 228 228 228 228 307 314 317 3609 5609 5609 5609 5613 3620 722	
JP HU NZ EP ZA	4234435 20040008842 526473 1702920 R: AT, BR, IE, SI, 2003001697 2003001700 2003001700 2003001704 2003001704 2003001794 2003001479 2003004479 2003004471 2003004471 2003004472 2003004472 2003004472 2003005609 2003005600 20040224944	CH, LT,	B2 A2 A1 DE, LV, A A A A A A A A A A A A A A A A A A A	20090304 20040728 20050624 20060920 DK, ES, FR, F1, R0, MK, 20040301 20040301 20040301 20040301 20040301 20040301 20040302 20050311 20030513 20030513 20030513 20040624 20040624 20040624 20040624 20040625 20040625 20030606 20040626 20040627 20040627 20040628	H H H H H H H H H H H H H H H H H H H	U 20 20 20 20 20 20 20 20 20 20 20 20 20	004- 001- 006- TR 003- 00	842 5264 11799 LI, 1697 1700 1702 1704 1698 8KN289 1190 224468 4469 4470 4473 4475 4474 4473 6609 6610 66248(73 } LU,	NL,	2:22 2:22 2:22 2:22 2:22 2:22 2:22 2:2	00111 MC, 003000 00300 00300 00300 00300 00300 00300 00300 00300 003000 00300 00300 00300 00300 00300 00300 00300 00300 003000 00300 00300 00300 00300 00300 00300 00300 00300 003000 00300 00300 00300 00300 00300 00300 00300 00300 003000 00300 00300 00300 00300 00300 00300 00300 00300 003000 00300 00300 00300 00300 00300 00300 00300 00300 003000 00300 00300 00300 00300 00300 00300 00300 00300 0030	219 219 PT, 228 228 228 228 228 228 3314 3317 509 509 509 509 509 509 509 509 722	
JP HU NZ EP ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA ZA	4234435 2004000842 526473 1702920 R: AT, BE, IE, SI, 2003001699 2003001700 2003001702 2003001702 2003001190 2003001190 2003001190 200300199 200300199 200300199 2003004473 2003004474 2003004474 2003004474 2003005619 2003005619 2003005619 2003005619 20040224944 7008948	CH, LT,	B2 A2 A1 DE, LV, A A A A A A A A A A A A A A A A A A A	20090304 20040728 20090624 20060624 20060624 2006090 DK, ES, FR, FR, RO, MK, 20040301 20040301 20040301 20040301 20040301 20040302 20050311 20030616 20040624 20040624 20040624 20040625 20040625 20040625 20040626 20040626	H H H H H H H H H H H H H H H H H H H	U 202 202 202 202 202 202 202 202 202 20	004- 001- 1T, TR 003- 003	842 5264 11799 LI, 1697 1700 17002 1704 1698 KN288 4469 4471 4473 4475 4474 4474 6669 66248 66923	73) LU,	NL,	2: 2: 2: 2: 2: 2: 2: 2: 2: 2: 2: 2: 2: 2	00111. MC, 003000 00300 00300 00300 00300 00300 00300 00300 00300 003000 00300 00300 00300 00300 00300 00300 00300 00300 003000 00300 00300 00300 00300 00300 00300 00300 00300 003000 00300 00300 00300 00300 00300 00300 00300 00300 003000 00300 00300 00300 00300 00300 00300 00300 00300 00300 00300 00300 00300 00300 00300 00300 00300 00300 00300	219 219 219 PT, 228 228 228 228 228 307 314 317 5609 5609 5609 5609 5609 5609 5609 5609	
JP HU NZ EP ZA	4234435 2004000842 526473 1702920 R: AT, BB, IE, SI, 2003001697 2003001700 2003001700 2003001704 2003001704 2003001794 2003001470 2003004470 2003004471 2003004473 2003004472 2003004472 2003004474 2003005609 2003005600 20040224944 2003005610 20040224944 20080888 20040116454	CH, LT,	B2 A2 A1 DE, LV, AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	20090304 20040728 20050624 20060920 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301 20040301 20040301 20040301 20040302 20050311 20030513 20030513 20030606 20040624 20040624 20040624 20040624 20040625 20040624 20040624 20040624 20040624 20040624 20040624 20040624 20040624 20040624 20040624 20040627 20040627 20040627 20040627 20040627 20040627 20040627 20040627 20040627 20040627 20040627 20040627 20040627 20040627 20040627 20040627 20040627	H H H H H H H H H H H H H H H H H H H	U 202 202 202 202 202 202 202 202 202 20	004- 0016- 17, TR 003- 00	842 5264 11799 LI, 1697 1700 1704 1698 1704 1698 1698 1698 1698 1698 1699 1704 1699 1699 1699 1699 1699 1699 1699 169	73) LU,	NL,	22 22 22 22 22 22 22 22 22 22 22 22 22	00111 00111 MC, 003000 0030 00300 0000 00300 00300 00300 00300 00300 00300 00300 00300 003	219 219 219 PT, 228 228 228 228 228 307 314 317 5009 5009 5009 513 520 722	
JP HU NZ EP ZA	4234435 2004000842 526473 1702920 R: AT, BE,	CH, LT,	B2 A2 A1 DE, LV, A A A A A A A A A A A A A A A A A A A	20090304 20040728 20050624 20060920 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301 20040301 20040301 20040302 20050311 20030513 20030606 20040624 20040624 20040625	GB, CY, Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	U 202 202 202 202 202 202 202 202 202 20	004- 1001- 1001- 1003- 100	842 55264'11799 LI, 1697 1700 17002 1704 1698 17004 1698 1409 4470 4471 4473 4475 4474 4474 4474 4474 4474 6609 66248 6923	73) LU,	NL,	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	00111 00111 00111 MC, 00303 003000 00300 00300 00300 00300 00300 00300 00300 00300 003000 00300 00300 00300 00300 00300 00300 00300 00300 003000 00300 00300 00300 00300 00300 00300 00300 00300 003000 00300 00300 00300 00300 00300 00300 00300 00300 003000 00300 00300 00300 00300 00300 00300 00300 00300 003000 00300 00300 00300 00300 00300 00300 00300 00300 003000 00300 00300 00300 00300 00300 00300 00300 00300 0030	219 219 219 PT, 228 228 228 228 228 228 307 314 5609 5609 5609 5609 5609 722	
JP HU NZ EP ZA	K: AI, BE,	CH, LT,	B2 A2 A A A A A A A A A A A A A A A A A	20090304 20040728 20050624 20060920 DK, ES, FR, FI, RO, MK, 20040301 20040301 20040301 20040301 20040301 20040301 20040301 20050311 20030513 20030606 20040624 20040624 20040624 20040622 20040624	GB, CY, Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	U 202 202 202 202 202 202 202 202 202 20	004-:000-:000-:000-:000-:000-:000-:000-	842 55264'11795 LI, 1697 1699 1700 1700 1700 1700 1700 1900 14468 4469 4470 4471 4474 4474 4474 4474 66923'	73) LU,	NL,	2: 22: 22: 22: 22: 22: 22: 22: 22: 22:	00111 00111 MC, 003000 00300 00300 00300 00300 00300 00300 00300 00300 003000 00300 00300 00300 00300 00300 00300 00300 00300 003000 00300 00300 00300 00300 00300 00300 00300 00300 003000 00300 00300 00300 00300 00300 00300 00300 00300 003000 00300 00300 00300 00300 00300 00300 00300 00300 003000 00300 00300 00300 00300 00300 00300 00300 00300 003000 00300 00300 00300 00300 00300 00300 00300 00300 0030	219 219 219 PT, 228 228 228 228 228 228 307 314 3319 509 509 509 513 520 520 522 522 522 522 522 522 522 522	

IIS	20040132781	A1	20040708	IIS	2003-736426		20031215	<
US		B2	20060808	0.0	2003 130120		20001210	
US		A1	20040826	IIS	2004-775699		20040210	<
	7427681	B2	20080923					
HK	1060347	A1	20061201	HK	2004-101883		20040315	<
JP		A	20050414		2004-366925		20041217	
US		A1	20071122		2006-369220		20060306	
AU		A1	20060413		2006-201228		20060321	
	2006201229	A1	20060413		2006-201229		20060321	
	2006201229	B2	20081120					
AU		A1	20060413	AU	2006-201230		20060321	<
AU	2006201230	B2	20080911					
AU	2006201262	A1	20060427	AU	2006-201262		20060321	<
AU	2006201262	B2	20080904					
AU	2006201263	A1	20060427	AU	2006-201263		20060321	<
AU	2006201263	B2	20081030					
AU	2006201264	A1	20060427	AU	2006-201264		20060321	<
	2006201265	A1	20060427	AU	2006-201265		20060321	<
AU	2006201265	B2	20080904					
US	20060258658	A1	20061116	US	2006-492450		20060725	<
IN	2007KN02703	A	20080801		2007-KN2703		20070723	<
JP		A	20080522		2008-15681		20080125	
JP		A	20080821		2008-95581		20080401	
		A	20081030		2008-95584		20080401	
JP		A	20080925		2008-97620		20080403	
JP		A	20080821	JP			20080404	<
	20080287444	A1	20081120		2008-109598		20080425	
JP		A	20080904		2008-121723		20080507	
JP		A	20081016		2008-121724		20080507	
	2008247921	A	20081016		2008-121727		20080507	
	2008252044	A1	20090122		2008-252044	_	20081203	
PRIORIT	Y APPLN. INFO.:			US	2000-232795P	P	20000915	
					2000-257887P	P P	20001221	
					2001-286949P		20010427	<
					2001-296871 2001-296875	A3	20010914	
					2001-290914		20010914	
					2001-90914	A A3		
					2001-90944		20010914	
					2001-94558			<
					2001-96871		20010914	
					2001-96875		20010914	
				EP	2001-971082		20010914	
				JP		A3		
					2001-952671		20010914	
					2001-953471			<
					2001-955601		20010914	
					2001-US28792	W	20010914	
					2002-234047			<
				AU	2002-34047	TO	20011219	<
					2001-273861	A		<
				EP	2001-994323	A3	20011219	<
				JP	2002-551561	A3	20011219	<
					2002-557938	A3	20011219	<
				JP	2002-559413	A3	20011219	<
				JP	2002-563142	A3	20011219	<
				JP	2002-565976	A3	20011219	<
				JP	2002-567928	A3	20011219	<
					2001-26966		20011219	
					2001-US49139	W	20011219	
				WO	2001-US50312	W	20011219	
				JP	2002-551562	A3	20011220	<

JP	2002-559414	A3	20011220	<
US	2001-34019	A3	20011220	<
US	2001-34683	A1	20011220	<
IN	2003-KN795	A3	20030619	<
US	2003-624800	A3	20030722	<
US	2004-775699	A1	20040210	
AU	2006-201396	A3	20060404	

OTHER SOURCE(S):

MARPAT 136:247606

AB The preparation of title compds. I and their pharmaceutically acceptable salts or prodrugs is described [wherein: R1, R2 = dependently form (un) substituted fused, unsatd. or partially unsatd., 5-8 membered carbocyclo ring; R3, R4 = independently H, aliphatic, aryl, heteroaryl, heterocyclyl, or wide variety of functionalized sidechains; or dependently form a fused, 5-8 membered, unsatd. or partially unsatd. ring having 0-3ring heteroatoms (N, S, O); R5 = fused, (un)substituted 5-7 membered monocyclic ring or 8-10 membered bicyclic ring (aryl, heteroaryl, heterocyclyl or carbocyclyl, said heteroaryl or heterocyclyl ring having 1-4 ring heteroatoms (N, S, O))]. For example, chlorination of quinazolone II with phosphorus oxychloride, followed by condensation with 3-amino-5-methylpyrazole afforded claimed compound III. Compds. I are inhibitors of GSK-3 and Aurora-2 protein kinases. The invention also relates to methods of treating diseases associated with these protein kinases, such as diabetes, cancer and Alzheimer's disease. In bioassays, compds. I inhibited the following kinases with Kis reported < 100 nM: GSK-3β (163 compds.), AURORA-2 (65 compds.), CDK-2 (no data), ERK2 (8 compds.), AKT (no data), and Human Src kinase (21 compds.). Claims included 146 specific compds., and 188 examples were given. The syntheses of 6 compds. and 46 intermediates are described. 404828-10-0P 404828-11-1P 404828-12-2P

404828-45-1P 404828-50-8P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(Uses)

(preparation of 3-(4-pyrimidinylamino)pyrazole compds. as protein kinase inhibitors)

- RN 404828-10-0 CAPLUS
- CN 4-Quinazolinamine, N-(5-methyl-1H-pyrazol-3-yl)-2-(4-pyridinyl)- (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

- 404828-11-1 CAPLUS
- CN 4-Quinazolinamine, 7-chloro-N-(5-methyl-1H-pyrazol-3-yl)-2-(4-pyridinyl)-(CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

- RN 404828-12-2 CAPLUS
- CN
 - 4-Quinazolinamine, 6-chloro-N-(5-methyl-1H-pyrazol-3-yl)-2-(4-pyridinyl)-(CA INDEX NAME)

RN 404828-45-1 CAPLUS

CN 4-Quinazolinamine, N-1H-pyrazol-3-yl-2-(4-pyridinyl)- (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 404828-50-8 CAPLUS

CN 4-Quinazolinamine, N-[5-(1,1-dimethylethyl)-1H-pyrazol-3-yl]-2-(4-pyridinyl)- (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 14 OF 21 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:220579 CAPLUS

DOCUMENT NUMBER: 136:247580

TITLE: Preparation of pyrazolamines and analogs as protein kinase inhibitors for treatment of cancer, diabetes,

and Alzheimer's disease

INVENTOR(S): Davies, Robert; Li, Pan; Golec, Julian; Bebbington,

David

PATENT ASSIGNEE(S): Vertex Pharmaceuticals Incorporated, USA

SOURCE: PCT Int. Appl., 406 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 14 PATENT INFORMATION:

No. DATE APPLICATION NO. DATE NO.		TENT NO.			KIN	D	DATE			APPI	ICAT	ION	NO.		D	ATE		
RW: GH, GH, KE, LS, NM, MZ, SD, SL, SZ, TZ, UG, ZM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, TE, TI, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG AU 2001090912 A 20020321 CA 2001-2422367 20010914 < US 20030055044 A1 20030320 US 2001-953505 20010914 < US 6638926 B2 20031028 US 20030064981 A1 20030403 US 2001-952836 20010914 < US 6613776 B2 20030902 US 20030064982 A1 20030902 US 20030064982 A1 20030403 US 2001-952875 20010914 < US 673691 B2 20030902 US 20030073867 A1 20030417 US 2001-952671 20010914 < US 6660731 B2 20031209 US 20030078166 A1 20030424 US 2001-955601 20010914 < US 6660673 B2 2004024 US 2003008327 A1 20030611 US 2001-95583 20010914 < US 6660677 B2 20030826 US 20317447 B1 20030611 EP 2001-97069 20010914 < EP 1317447 B1 20060517 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,	WO	20020226 W: AE, CO, GM, LS, PT,	AG, CR, HR, LT, RO,	AL, CU, HU, LU, RU,	A1 AM, CZ, ID, LV, SD,	AT, DE, IL, MA, SE,	AU, DK, IN, MD, SG,	AZ, DM, IS, MG,	BA, DZ, JP, MK,	WO 2 BB, EC, KE, MN,	BG, EE, KG, MW,	US28 BR, ES, KP, MX,	738 BY, FI, KR, MZ,	BZ, GB, KZ, NO,	CA, GD, LC, NZ,	CH, GE, LK, PH,	914 CN, GH, LR, PL,	
BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG CA 2422367 Al 20020321 CA 2001-242367 20010914 < AU 2001090912 A 20020326 AU 2001-90912 20010914 < US 2003005044 Al 20030320 US 2001-955505 20010914 < US 6638926 BE 20031028 US 20030064991 Al 20030403 US 2001-952836 20010914 < US 6613776 BE 20030902 US 20030064992 Al 20030902 US 20030064992 Al 20030403 US 2001-952875 20010914 < US 7473691 BE 20090106 US 20030073667 Al 20030417 US 2001-952671 20010914 < US 6660731 BE 20031209 US 20030078166 Al 20031209 US 20030078166 Al 20030424 US 2001-955601 20010914 < US 6696452 B2 20040224 US 20030083327 Al 20030501 US 2001-952833 20010914 < US 6610677 B2 20030826 EP 1317447 Al 20030611 EP 2001-970969 20010914 < EP 1317447 Al 20030611 EP 2001-970969 20010914 < EP 1317447 Al 20036617 ER 2 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,		RW: GH,	GM,	KE,	LS,	MW,	MZ,											
CA 2422367 A1 20020321 CA 2001-2422367 20010914 < US 20030055014 A1 20020326 A0 2001-90912 20010914 < US 20030055014 A1 20030320 US 2001-953505 20010914 < US 6638926 B2 20031028 US 20030064981 A1 20030403 US 2001-952836 20010914 < US 6613776 B2 20030902 US 20030064982 A1 20030902 US 20030064982 A1 20030403 US 2001-952875 20010914 < US 7473691 B2 20090106 US 20030073687 A1 20030417 US 2001-952671 20010914 < US 6660731 B2 20031209 US 20030078166 A1 20030424 US 2001-955601 20010914 < US 6696452 B2 20040224 US 20030083327 A1 20030501 US 2001-952833 20010914 < US 6610677 B2 20030826 EP 1317447 A1 20030611 EP 2001-970969 20010914 < EP 1317447 EP 1317447 RE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,																	BF,	
US 20030055044 A1 20030320 US 2001-953505 20010914 < US 6638926 B2 20031028 US 20030064981 A1 20030403 US 2001-952836 20010914 < US 6613776 B2 20030902 US 20030064982 A1 20030403 US 2001-952875 20010914 < US 7473691 B2 20090106 US 20030073687 A1 20030417 US 2001-952671 20010914 < US 6660731 B2 20031209 US 20030078166 A1 20030424 US 2001-955601 20010914 < US 696452 B2 20040224 US 20030083327 A1 20030501 US 2001-952833 20010914 < US 6610677 B2 20030826 EP 1317447 A1 20036611 EP 2001-970969 20010914 < EP 1317447 A1 20036611 EP 2001-970969 20010914 < EP 1317447 RE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,	CZ	2422267	CF,	CG,	CI,	CM,	2002	GN,	GQ,	Ca C	ML,	2422	NE,	SN,	10,	16	014	_
US 20030055044 A1 20030320 US 2001-953505 20010914 < US 6638926 B2 20031028 US 20030064981 A1 20030403 US 2001-952836 20010914 < US 6613776 B2 20030902 US 20030064982 A1 20030403 US 2001-952875 20010914 < US 7473691 B2 20090106 US 20030073687 A1 20030417 US 2001-952671 20010914 < US 6660731 B2 20031209 US 20030078166 A1 20030424 US 2001-955601 20010914 < US 696452 B2 20040224 US 20030083327 A1 20030501 US 2001-952833 20010914 < US 6610677 B2 20030826 EP 1317447 A1 20036611 EP 2001-970969 20010914 < EP 1317447 A1 20036611 EP 2001-970969 20010914 < EP 1317447 RE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,	AII.	20010000	12		A.I		2002	0321		AII S	001-	0001	307		2	0010	214	>
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,	HO	20010909	044		7.1		2002	0320		HU 2	001-	9091. 9595	0.5		2	0010	214	>
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,	116	6630036	044		D3		2003	1020		00 2	.001-	9333	0.5		2	0010	214	\
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,	116	20030920	001		7.1		2003	1020		TTC 3	001-	0520	36		2	0010	91/	/
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,	115	6613776	201		R2		2003	0403		05 2	.001-	JJ20.	50			0010	214	
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,	IIS	20030064	982		A1		2003	0403		IIS 2	001-	9528	75		2	0010	914	<
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,	US	7473691	J 0 L		B2		2009	0106			.001	3020			_	0010		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,	US	20030073	687		A1		2003	0417		US 2	001-	9526	71		2	0010	914	<
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,	US	6660731			B2		2003	1209										
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,	US	20030078	166		A1		2003	0424		US 2	001-	9556	01		2	0010	914	<
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,	US	6696452			B2		2004	0224										
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,	US	20030083	327		A1		2003	0501		US 2	001-	9528	33		2	0010	914	<
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,	US	6610677			B2		2003	0826										
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,	EP	1317447			A1		2003	0611		EP 2	001-	9709	69		2	0010	914	<
	EP																	
TE, SI, LT, LV, FI, RO, MK, CY, AL, TR ZA 2003001701 A 20040301 ZA 2003-1701 20010914 < ZA 2003001703 A 20040302 ZA 2003-1703 20010914 < US 20040097501 A1 20040520 US 2001-953471 20010914 < US 7115739 B2 20061003 JP 2004525075 T 20040819 JP 2002-526856 20010914 < US 20050004110 A1 20050106 US 2001-952878 20010914 < US 7098330 B2 20060829																		
ZA 2003001701 A 20040301 ZA 2003-1701 20010914 < ZA 2003001703 A 20040302 ZA 2003-1703 20010914 < US 20040097501 A1 20040520 US 2001-953471 20010914 < US 7115739 B2 20061003 JP 2004525075 T 20040819 JP 2002-526856 20010914 < US 20050004110 A1 20050106 US 2001-952878 20010914 < US 7098330 B2 20060829		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR				_			
ZA 2003001/03 A 20040302 ZA 2003-1703 20010914 < US 20040097501 A1 20040520 US 2001-953471 20010914 < US 7115739 B2 20061003 JP 2004525075 T 20040819 JP 2002-526856 20010914 < US 20050004110 A1 20050106 US 2001-952878 20010914 < US 7098330 B2 20060829	ZA	20030017	0.1		A		2004	0301		ZA 2	003-	1/01			21	0010	914	<
US 7015739 B2 20061003 JP 2004525075 T 20040819 JP 2002-526856 20010914 < US 7005004110 A1 20050106 US 2001-952878 20010914 < US 7098330 B2 20060829	ZA	20030017	03		A		2004	0302		ZA 2	003-	1/03			2	0010	914	<
US 7098330 B2 20060829 JP 2002-526856 20010914 < US 7098330 B2 20060829	0.5	20040097	201		A1		2004	1002		05 2	-100	9554	/ 1		2	OOTO:	914	<
US 20050004110 A1 20050106 US 2001-952878 20010914 < US 7098330 B2 20060829	US TD	7113735	76		DZ T		2000	0010		TD 0	002-	5260	5.6		2	0010	014	
US 7098330 B2 20060829	UP	20043230	110		3.1		2004	0106		UP 2	002-	05200	70		2	0010	914	Ş
03 7090330 B2 20000029	110	70000004	110		MT.		2005	0100		05 2	-100	3320	/ 0			0010	214	\
ES 2242771 T3 20051116 ES 2001-971006 20010914 <	ES	2242771			Т3		2005	1116		ES 2	001-	9710	06		2	0010	914	<
T 20060615 T 20010914 <	AT	326458			т		2005	0615		AT 2	001	9709	69		2	0010	914	
AT 327990 T 20060615 AT 2001-970971 20010914 <	AT	327990			T		2006	0615		AT 2	001-	9709	71		2	0010	914	<
AT 327992 T 20060615 AT 2001-971082 20010914 <	AT	327992			Ť		2006	0615		AT 2	001-	9710	82		2	0010	914	<
AT 327991 T 20060615 AT 2001-973050 20010914 <	AT	327991			T		2006	0615		AT 2	001-	9730	50		2	0010	914	<
AT 326459 T 20060615 AT 2001-977779 20010914 <	AT	326459			Т		2006	0615		AT 2	001-	9777	79		2	0010	914	<
EP 1698627 A1 20060906 EP 2006-10798 20010914 <	EP	1698627			A1		2006	0906		EP 2	006-	1079	8		2	0010	914	<
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,		R: AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	

```
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
   AT 346064 T 20061215 AT 2001-975210 20010914 <--
ES 2266258 T3 20070301 ES 2001-970971 20010914 <--
 ES 2266258 T3 20070301 ES 2001-970971
ES 2266259 T3 20070301 ES 2001-970971
ES 2266259 T3 20070301 ES 2001-97071082
AT 363284 T 20070615 AT 2001-977783
NZ 545284 A 20070629 NZ 1984-5452
CX 100355750 C 20071219 CN 2001-817427
CA 2432303 A1 20020829 CA 2001-2432303
AU 2002255452 B1 20020904 AU 2002-255452
AU 20022255452 B2 20060608
CA 2432223 A1 20020906 CA 2001-2432223
CA 2432223 C 20080520
AU 2001297619 A1 20020912 AU 2001-297619
AU 2001297619 B2 20060608
EP 1345922 B1 20060531
EP 1345922 B1 20060531
EP 1345922 B1 20060531
                                                                                                                                                                                                                                                         20010914 <--
                                                                                                                                                                                                                                                         20010914 <--
                                                                                                                                                                                                                                                           20010914 <--
                                                                                                                                                                                                                                                         20010914 <--
                                                                                                                                                                                                                                                         20011219 <--
                                                                                                                                                                                                                                                           20011219 <--
                                                                                                                                                                                                                                                             20011219 <--
                                                                                                                                                                                                                                                           20011219 <--
                                                                                                                                                                                                                                                          20011219 <--
                  R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
                                  IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
   EP 1355905 B1 20070221 EP 2001-273861 20011219 <--
                   R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
  IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, FT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

ZA 2003001697 A 20040301 ZA 2003-1697 20030228 <--
ZA 2003001699 A 20040301 ZA 2003-1699 20030228 <--
ZA 2003001700 A 20040301 ZA 2003-1700 20030228 <--
ZA 2003001702 A 20040301 ZA 2003-1700 20030228 <--
ZA 2003001702 A 20040301 ZA 2003-1704 20030228 <--
ZA 2003001704 A 20040301 ZA 2003-1704 20030228 <--
ZA 2003001698 A 20040301 ZA 2003-1704 20030228 <--
ZA 2003001698 A 20040302 ZA 2003-1704 20030228 <--
ZA 2003004468 A 20040624 ZA 2003-4468 20030609 <--
ZA 2003004468 A 20040624 ZA 2003-4468 20030609 <--
ZA 2003004470 A 20040624 ZA 2003-4469 20030609 <--
ZA 2003004471 A 20040624 ZA 2003-4471 20030609 <--
ZA 2003004473 A 20040624 ZA 2003-4471 20030609 <--
ZA 2003004473 A 20040624 ZA 2003-4471 20030609 <--
ZA 2003004473 A 20040624 ZA 2003-4473 20030609 <--
ZA 2003004474 A 20040625 ZA 2003-4474 20030609 <--
ZA 2003004474 A 20030821 NO 2003-2704 20030609 <--
ZA 2003004474 A 20030821 NO 2003-2704 20030609 <--
XX 2003005609 A 20031006 MX 2003-5609 20030620 <--
XX 2003005609 A 20031006 MX 2003-5609 20030620 <--
XX 2003005610 A 20031006 MX 2003-5610 20030620 <--
XX 2003005610 A 20031006 MX 2003-5610 20030620 <--
XX 20040224944 A1 20041111 US 2003-692355 20031023 <--
XX 2003005610 A 20031006 MX 2003-5610 20030620 <--
XX 20040157893 A1 20040617 US 2003-692355 20031023 <--
XX 20040157893 A1 20040610 HK 2003-108474 20031120 <--
XX 20040157893 A1 20040610 US 2003-736426 20031125 <--
XX 20040137781 A1 20040812 US 2003-736426 20031125 <--
XX 20040137781 A1 20040826 US 2004-775699 20040210 <--
XX 20040167444 A1 20040812 US 2003-736426 20031125 <--
XX 20040137781 A1 20040826 US 2004-775699 20040210 <--
XX 20040167744 A1 20040826 US 2004-775699 20040210 <--
XX 20040167744 A1 20040826 US 2004-775699 20040210 <--
XX 200401674
                                   IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
```

AU 2006201228	A1	20060413	AU 2006-201228		20060321	/
AU 2006201229	A1	20060413	AU 2006-201229		20060321	
AU 2006201229	B2	20081120				
AU 2006201230	A1	20060413	AU 2006-201230		20060321	<
AU 2006201230	B2	20080911				
AU 2006201262	A1	20060427	AU 2006-201262		20060321	<
AU 2006201262	B2	20080904				
AU 2006201263	A1	20060427	AU 2006-201263		20060321	<
AU 2006201263	B2	20081030	377 0006 001064		00000000	
AU 2006201264 AU 2006201265	A1 A1	20060427 20060427	AU 2006-201264 AU 2006-201265		20060321	
AU 2006201265	B2	20080904	AU 2000-201265		20000321	\
AU 2006201203	A1	20060427	AU 2006-201391		20060404	<
AU 2006201391	B2	20081113	110 2000 201031		20000101	
US 20060258658	A1	20061116	US 2006-492450		20060725	<
IN 2007KN02703	A	20080801	IN 2007-KN2703		20070723	<
JP 2008115195	A	20080522	JP 2008-15681		20080125	<
JP 2008189682	A	20080821	JP 2008-95581			<
JP 2008260767	A	20081030	JP 2008-95584			<
JP 2008222719	A	20080925	JP 2008-97620			<
JP 2008189687 US 20080287444	A	20080821	JP 2008-98506		20080404	<
US 20080287444 JP 2008201808	A1 A	20081120 20080904	US 2008-109598 JP 2008-121723		20080425	/
JP 2008247920	A	20081016	JP 2008-121724		20080507	
JP 2008247921	A	20081016	JP 2008-121727		20080507	
AU 2008252044	A1	20090122	AU 2008-252044			<
PRIORITY APPLN. INFO.:			US 2000-232795P	P	20000915	<
			US 2000-257887P	P	20001221	<
			US 2001-286949P	P	20010427	<
			AU 2001-296871	A3	20010914	<
			AU 2001-296875	A3		<
			AU 2001-90912			<
			AU 2001-90914	A	20010914	<
			AU 2001-90944 AU 2001-91013	A3 A3		<
			AU 2001-91013 AU 2001-94558	A3		<
			AU 2001-96871	T0	20010914	
			AU 2001-96875	T0		<
			EP 2001-971082	A3	20010914	<
			JP 2002-526860	A3	20010914	<
			US 2001-952671		00010311	<
			US 2001-953471			<
			US 2001-955601	A3	20010914	
			WO 2001-US28738 AU 2002-234047	W A3	20010914	<
			AU 2002-234047	TO	20011219	<
			EP 2001-273861	A	20011219	<
			EP 2001-994323	A3	20011219	<
			JP 2002-551561	A3		<
			JP 2002-557938	A3	20011219	<
			JP 2002-559413	A3	20011219	<
			JP 2002-563142	A3	20011219	<
			JP 2002-565976		20011219	<
			JP 2002-567928	A3		<
			US 2001-26966 WO 2001-US49139	A1 W		<
			WO 2001-US50312	W	20011219	<
			JP 2002-551562	A3	20011219	<
			JP 2002-559414			<
			US 2001-34019			<
			US 2001-34683	A1		
			IN 2003-KN795	A3	20030619	<

US 2003-624800 A3 20030722 <--US 2004-775699 A1 20040210 AU 2006-201396 A3 20060404

): MARPAT 136:247580

OTHER SOURCE(S): GI

as

0.1-1.0 uM for Aurora-2.

Title compds. I [wherein G = Ring C or Ring D; Ring C = (un)substituted AB Ph, pyridinyl, pyrimidinyl, pyridazinyl, pyrazinyl, or 1,2,4-triazinyl; Ring D = (un)substituted monocyclic or bicyclic ring selected from aryl, heteroaryl, heterocyclyl, or carbocyclyl; Z1 = N or CR9; Z2 = N or CH; Z3 = N or CRx; Z4 = N or CRy; Rx and Ry = independently TR3, or taken together with their intervening atoms form an (un)saturated fused ring having 1-3 ring heteroatoms; R2 and R2a = independently R, TWR6; or C2R2R2a = (un) substituted fused ring containing 0-3 heteroatoms; T = a bond or alkylidene chain; W = C(R6)20, C(R6)2S0-2, C(R6)2NR6, CO, CO2, CR60CO, CREOCONRE, C(RE) 2NRECO, C(RE) 2NRECO2, CRE:NNRE, CRE:NO, C(RE) 2NRENRE, C(R6) 2NR6SO2NR6, C(R6) 2NR6CONR6, or CONR6; R = H or (un) substituted aliphatic, (hetero)aryl, or heterocyclyl ring; R3 = R, halo, O, OR, COR, CO2R, COCOR, COCH2COR, NO2, CN, SO0-2R, N(R4)2, CON(R4)2, SO2N(R4)2, OCOR, NR4COR, NR4CO2(aliphatic), NR4N(R4)2, C:NN(R4)2, C:NOR, NR4CO(R4)2, NR4SO2N(R4)2, NR4SO2R, or OCON(R4)2; R4 = R7, COR7, CO2(aliphatic), CON(R7)2, or SO2R7; or N(R4)2 = heterocyclyl or heteroaryl; R6 and R7 = independently H or (un)substituted aliphatic group; or N(R6)2 = heterocyclyl or heteroaryl; or N(R7)2 = heterocyclyl or heteroaryl; R9 = R, halo, OR, COR, CO2R, COCOR, etc.] were prepared as protein kinase inhibitors, especially

inhibitors of Aurora-2 and GSK-3, for treating diseases such as cancer, diabetes, and Alzheimer's disease. Claims cover (trizainyl)pyrazolamines and indazolamines I [wherein Zl, Z2, and Z3 = N, Z4 = CRy]. Examples include data for approx. 300 invention compds. prepared by a variety of synthetic methods and bioassay results for the inhibition of GSK-β3, Aurora-2, ERK, and Src. For instance, the N-(4-pyrimidinyl)-3-pyrazolamine II was prepared and exhibited Ki values of < 0.1 uM for alvooren synthetase kinase 3B (GSK-3B) and

I 404828-10-0P, (5-Methyl-2H-pyrazol-3-yl)(2-pyridin-4-ylquinazolin-4-yl)-amine 404828-11-1P.

(7-Chloro-2-pyridin-4-ylquinazolin-4-yl)(5-methyl-2H-pyrazol-3-yl)amine 404828-12-2P, (6-Chloro-2-pyridin-4-ylquinazolin-4-yl)(5-methyl-2H-pyrazol-3-yl)amine 404828-45-1P,

(2H-Pyrazol-3-yl)(2-pyridin-4-ylquinazolin-4-yl)amine 404828-50-8P, (5-tert-Butyl-2H-pyrazol-3-yl)(2-pyridin-4-ylquinazolin-4-yl)amine RL: PAC (Pharmacoloqical activity); SPN (Synthetic preparation); THU

(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(protein kinase inhibitor; preparation of heterocyclylpyrazolamines and analogs as protein kinase inhibitors for treatment of cancer, diabetes, and Alzheimer's disease)

RN 404828-10-0 CAPLUS

CN 4-Quinazolinamine, N-(5-methyl-1H-pyrazol-3-yl)-2-(4-pyridinyl)- (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 404828-11-1 CAPLUS

CN 4-Quinazolinamine, 7-chloro-N-(5-methyl-1H-pyrazol-3-yl)-2-(4-pyridinyl)-(CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 404828-12-2 CAPLUS

CN 4-Quinazolinamine, 6-chloro-N-(5-methyl-1H-pyrazol-3-yl)-2-(4-pyridinyl)-(CA INDEX NAME)

RN 404828-45-1 CAPLUS

CN 4-Quinazolinamine, N-1H-pyrazol-3-yl-2-(4-pyridinyl)- (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 404828-50-8 CAPLUS

CN 4-Quinazolinamine, N-[5-(1,1-dimethylethyl)-1H-pyrazol-3-yl]-2-(4-pyridinyl)- (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 15 OF 21 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:220578 CAPLUS

DOCUMENT NUMBER: 136:263164

TITLE: Preparation of triazolamines as protein kinase inhibitors for treatment of cancer, diabetes, and

Alzheimer's disease

Bebbington, David; Knegtel, Ronald; Binch, Haley; INVENTOR(S): Golec, Julian M. C.; Li, Pan; Charrier, Jean-Damien

Vertex Pharmaceuticals Incorporated, USA

PATENT ASSIGNEE(S):

SOURCE:

PCT Int. Appl., 377 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 14 PATENT INFORMATION:

PATENT NO.		APPLICATION NO.	DATE
WO 2002022602 WO 2002022602	A2 20020321 A3 20020627	WO 2001-US42162	20010914 <
CO, CR, C GM, HR, F LS, LT, I PT, RO, F	CU, CZ, DE, DK, DM, HU, ID, IL, IN, IS, LU, LV, MA, MD, MG,	BA, BB, BG, BR, BY, B DZ, EC, EE, ES, FI, G JP, KE, KG, KP, KR, K MK, MN, MW, MX, MZ, N SK, SL, TJ, TM, TR, T	B, GD, GE, GH, Z, LC, LK, LR, IO, NZ, PH, PL,
DE, DK, E	ES, FI, FR, GB, GR, CG, CI, CM, GA, GN,	SL, SZ, TZ, UG, ZW, A IE, IT, LU, MC, NL, P GQ, GW, ML, MR, NE, S	T, SE, TR, BF,
CA 2422299	A1 20020321	CA 2001-2422299 AU 2001-96875	20010914 <
AU 2001096875	A 20020326	AU 2001-96875 US 2001-953505	20010914 <
US 20030055044 US 6638926 US 20030064981 US 6613776 US 20030064982	A1 20030320 B2 20031028		20010914 <
US 20030064981	A1 20031020		20010914 <
US 6613776	B2 20030902		
US 20030064982	A1 20030403	US 2001-952875	20010914 <
US 7473691	B2 20090106		
US 20030073687			20010914 <
US 6660731 US 20030078166	B2 20031209 A1 20030424		20010914 <
US 6696452	B2 20040224		20010314 (
US 20030083327	A1 20030501		20010914 <
US 6610677 EP 1318814	B2 20030826		
EP 1318814	A2 20030618		20010914 <
EP 1318814	B1 20070530		U OF NO DE
	LT, LV, FI, RO, MK,	GB, GR, IT, LI, LU, N	L, SE, MC, PI,
73 2003001701	a 20040301		20010914 <
ZA 2003001703	A 20040302	ZA 2003-1701 ZA 2003-1703	20010914 <
ZA 2003001703 JP 2004509114 JP 4105947 US 20040097501 US 7115739	T 20040325	JP 2002-526855	20010914 <
JP 4105947	B2 20080625		
US 20040097501	A1 20040520		20010914 <
US 7115739 US 20050004110			20010914 <
US 7098330	B2 20060829		
ES 2242771	T3 20051116		20010914 <
AT 326458	T 20060615 T 20060615 T 20060615 T 20060615 T 20060615		
AT 327990	T 20060615	AT 2001-970971	20010914 <
AT 327992	T 20060615	AT 2001-971082 AT 2001-973050	20010914 <
AT 327991	T 20060615	AT 2001-973050	20010914 <
AT 326459	T 20060615	AT 2001-977779	20010914 <

```
EP 1698627 A1 20060906 EP 2006-10798 20010914 <--
                 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
AT 346064 T 2 000161215 AT 2001-975210
ES 2266258 T3 20070301 ES 2001-970971
ES 2266259 T3 20070301 ES 2001-971082
AT 363284 T 20070615 AT 2001-977783
NZ 545284 A 20070629 NZ 1984-5452
CN 100355750 C 20071219 CN 2011-817427
CA 2432303 A1 20020829 CA 2001-2432303
AU 2002255452 B1 20020808
CA 2432223 A1 20020906 CA 2001-24322303
CA 2432223 C 20080520
AU 2001297619 B2 20060608
ED 1345922 B1 20060608
EP 1345922 B1 20060508
EP 1345922 B1 2006051
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL,
                                  IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                                                                                                                                                                                                                           20010914 <--
                                                                                                                                                                                                                                          20010914 <--
                                                                                                                                                                                                                                          20010914 <--
                                                                                                                                                                                                                                          20010914 <--
                                                                                                                                                                                                                                           20010914 <--
                                                                                                                                                                                                                                          20010914 <--
                                                                                                                                                                                                                                          20011219 <--
                                                                                                                                                                                                                                            20011219 <--
                                                                                                                                                                                                                                             20011219 <--
                                                                                                                                                                                                                                            20011219 <--
                                                                                                                                                                                                                                           20011219 <--
                  R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
                                 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
  EP 1355905 A1 20031029 EP 2001-273861 20011219 <--
EP 1355905 B1 20070221
                  R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
                                                                                                                                                                                                                                     20011219 <--
                                 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
 NZ 526472 A 20040430 NZ 2001-526472 20011219 <--

JP 2004518743 T 20040624 JP 2002-565976 20011219 <--

JP 2004519479 T 20040702 JP 2002-567928 20011219 <--

JP 4234435 B2 20090304
HU 2004000842 A2 20040728 HU 2004-842 20011219 <--

RD 526473 A 20050624 NZ 2001-526473 20011219 <--

EP 1702920 A1 20060920 EP 2006-11799 20011219 <--
                  R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LIT, LV, FI, RO, MK, CY, AL, TR

ZA 2003001699 A 20040301 ZA 2003-1699 20030228 <--
ZA 2003001700 A 20040301 ZA 2003-1702 20030228 <--
ZA 2003001704 A 20040301 ZA 2003-1702 20030228 <--
ZA 2003001704 A 20040301 ZA 2003-1702 20030228 <--
ZA 2003001704 A 20040301 ZA 2003-1702 20030228 <--
ZA 2003001698 A 20040301 ZA 2003-1702 20030228 <--
ZA 2003001698 A 20040601 ZA 2003-1702 20030228 <--
ZA 200300468 A 20040604 ZA 2003-1698 20030228 <--
ZA 2003004468 A 20040624 ZA 2003-4468 20030609 <--
ZA 2003004468 A 20040624 ZA 2003-4468 20030609 <--
ZA 2003004470 A 20040624 ZA 2003-4469 20030609 <--
ZA 2003004471 A 20040624 ZA 2003-4471 20030609 <--
ZA 2003004471 A 20040624 ZA 2003-4471 20030609 <--
ZA 2003004473 A 20040624 ZA 2003-4471 20030609 <--
ZA 2003004472 A 20040624 ZA 2003-4475 20030609 <--
ZA 2003004474 A 20040625 ZA 2003-4472 20030609 <--
ZA 2003004474 A 20040625 ZA 2003-4474 20030609 <--
ZA 2003004474 A 20040625 ZA 2003-4474 20030609 <--
ZA 2003004474 A 20040625 ZA 2003-4474 20030609 <--
XA 2003005609 A 20031006 MX 2003-5609 20030620 <--
XX 2003005609 A 20030620 <--
XX 2003005609 A 2003062
                                 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
```

JP 2005097322	A	20050414	JP 2004-366925	20041217 <
US 20070270444	A1	20071122	US 2006-369220	20060306 <
AU 2006201228	A1	20060413	AU 2006-201228	20060321 <
AU 2006201229	A1	20060413	AU 2006-201229	20060321 <
AU 2006201229	B2	20081120	110 2000 201223	50000051
AU 2006201230	A1	20060413	AU 2006-201230	20060321 <
AU 2006201230	B2	20080911		
AU 2006201262	A1	20060427	AU 2006-201262	20060321 <
AU 2006201262	B2	20080904		
AU 2006201263	A1	20060427	AU 2006-201263	20060321 <
AU 2006201263	B2	20081030		
AU 2006201264	A1	20060427	AU 2006-201264	20060321 <
AU 2006201265	A1	20060427	AU 2006-201265	20060321 <
AU 2006201265	B2	20080904		
US 20060258658	A1	20061116	US 2006-492450	20060725 <
IN 2007KN02703	A	20080801	IN 2007-KN2703	20070723 <
JP 2008115195	A	20080522	JP 2008-15681	20080125 <
JP 2008189682	A	20080821	JP 2008-95581	20080401 <
JP 2008260767	A	20081030	JP 2008-95584	20080401 <
JP 2008222719	A	20080925	JP 2008-97620	20080403 <
JP 2008189687	A	20080821	JP 2008-98506	20080404 <
US 20080287444	A1	20081120	US 2008-109598	20080425
JP 2008201808	A	20080904	JP 2008-121723	20080507 <
JP 2008247920	A	20081016	JP 2008-121724	20080507 <
JP 2008247921 AU 2008252044	A A1	20081016 20090122	JP 2008-121727 AU 2008-252044	20080507 < 20081203 <
PRIORITY APPLN. INFO.:	AI	20090122	US 2000-232795P	P 20000915 <
FRIORITI AFFEN. INFO.:			US 2000-257887P	P 20000313 <
			US 2001-286949P	P 20010427 <
			AU 2001-296871	A3 20010914 <
			AU 2001-296875	A3 20010914 <
			AU 2001-90914	A 20010914 <
			AU 2001-90944	A3 20010914 <
			AU 2001-91013	A3 20010914 <
			AU 2001-94558	A3 20010914 <
			AU 2001-96871	T0 20010914 <
			AU 2001-96875	T0 20010914 <
			EP 2001-971082	A3 20010914 <
			JP 2002-526860	A3 20010914 <
			US 2001-952671	A3 20010914 <
			US 2001-953471	A3 20010914 <
			US 2001-955601	A3 20010914 <
			WO 2001-US42162	W 20010914 <
			AU 2002-234047	A3 20011219 <
			AU 2002-34047	T0 20011219 <
			EP 2001-273861	A 20011219 <
			EP 2001-994323	A3 20011219 < A3 20011219 <
			JP 2002-551561 JP 2002-557938	A3 20011219 < A3 20011219 <
			JP 2002-559413	A3 20011219 <
			JP 2002-563142	A3 20011219 <
			JP 2002-565976	A3 20011219 <
			JP 2002-567928	A3 20011219 <
			US 2001-26966	A1 20011219 <
			WO 2001-US49139	W 20011219 <
			WO 2001-US50312	W 20011219 <
			JP 2002-551562	A3 20011220 <
			JP 2002-559414	A3 20011220 <
			US 2001-34019	A3 20011220 <
			US 2001-34683	A1 20011220 <
			IN 2003-KN795	A3 20030619 <
			US 2003-624800	A3 20030722 <

MARPAT 136:263164

AB Triazolamines I and pyrazolamines II [wherein G = Ring C or Ring D; Ring C = (un)substituted Ph, pyridinyl, pyrimidinyl, pyridazinyl, pyrazinyl, or 1,2,4-triazinyl; Ring D = (un)substituted monocyclic or bicyclic ring selected from aryl, heteroaryl, heterocyclyl, or carbocyclyl; Z1 = N or CR9; Z2 = N or CH; Z3 = N or CRx; Z4 = N or CRy; Rx and Ry = independently TR3, or taken together with their intervening atoms form an (un)saturated fused ring having 1-3 ring heteroatoms; R2 and R2a = independently R. TWR6; or C2R2R2a = (un)substituted fused ring containing 0-3 heteroatoms; T = a bond or alkylidene chain; W = C(R6)20, C(R6)2S0-2, C(R6)2NR6, CO, CO2, CR60CO, CR60CONR6, C(R6)2NR6CO, C(R6)2NR6CO2, CR6:NNR6, CR6:NO, C(R6) 2NR6NR6, C(R6) 2NR6SO2NR6, C(R6) 2NR6CONR6, or CONR6; R = H or (un) substituted aliphatic, (hetero) arvl, or heterocyclyl ring; R3 = R, halo, O, OR, COR, CO2R, COCOR, COCH2COR, NO2, CN, SO0-2R, N(R4)2, CON(R4)2, SO2N(R4)2, OCOR, NR4COR, NR4CO2(aliphatic), NR4N(R4)2, C:NN(R4)2, C:NOR, NR4CO(R4)2, NR4SO2N(R4)2, NR4SO2R, or OCON(R4)2; R4 = R7, COR7, CO2(aliphatic), CON(R7)2, or SO2R7; or N(R4)2 = heterocyclyl or heteroaryl; R6 and R7 = independently H or (un)substituted aliphatic group; or N(R6)2 = heterocyclyl or heteroaryl; or N(R7)2 = heterocyclyl or heteroaryl; R9 = R, halo, OR, COR, CO2R, COCOR, etc. | were prepared as protein kinase inhibitors, especially as inhibitors of Aurora-2 and GSK-3, for treating diseases such as cancer, diabetes, and Alzheimer's disease. Claims cover (heterocyclyl)triazolamines I [wherein Z1 = N or CR9; Z2 = N or CH; R9 is defined above]. Examples include data for approx. 300 invention compds. prepared by a variety of synthetic methods and bioassay results for the inhibition of GSK-β3, Aurora-2, ERK, and Src. For instance, the N-(4-quinazolinyl)-1H-1,2,4-triazol-3-amine III was prepared and exhibited Ki values of < 0.1 μ M for glycogen synthetase kinase 3 β (GSK-3β) and 1.0-20 μM for Aurora-2.

- II 404828-10-0P, (5-Methyl-2H-pyrazol-3-yl)(2-pyridin-4-ylquinazolin-4-yl)-amine 404828-11-1P,
 - (7-Chloro-2-pyridin-4-ylquinazolin-4-yl)(5-methyl-2H-pyrazol-3-yl)amine 404828-12-2P, (6-Chloro-2-pyridin-4-ylquinazolin-4-yl)(5-methyl-2H-pyrazol-3-yl)amine 404828-45-1P.
 - (ZH-Pyrazol-3-yl)(2-pyridin-4-ylquinazolin-4-yl)amine 404828-50-8P, (5-tert-Butyl-2H-pyrazol-3-yl)(2-pyridin-4-ylquinazolin-4-yl)amine 404891-18-5P
 - RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 - (protein kinase inhibitor; preparation of triazolamines, pyrazolamines, and analogs as protein kinase inhibitors for treatment of cancer, diabetes, and Alzheimer's disease)
- RN 404828-10-0 CAPLUS
- CN 4-Quinazolinamine, N-(5-methyl-1H-pyrazol-3-yl)-2-(4-pyridinyl)- (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

- RN 404828-11-1 CAPLUS
- CN 4-Quinazolinamine, 7-chloro-N-(5-methyl-1H-pyrazol-3-yl)-2-(4-pyridinyl)-(CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

- RN 404828-12-2 CAPLUS
- CN 4-Quinazolinamine, 6-chloro-N-(5-methyl-1H-pyrazol-3-yl)-2-(4-pyridinyl)-(CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 404828-45-1 CAPLUS

CN 4-Quinazolinamine, N-1H-pyrazol-3-yl-2-(4-pyridinyl)- (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 404828-50-8 CAPLUS

CN 4-Quinazolinamine, N-[5-(1,1-dimethylethyl)-1H-pyrazol-3-yl]-2-(4-pyridinyl)- (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 404891-18-5 CAPLUS

 $\texttt{CN} \qquad 4-\texttt{Quinazolinamine, N-(3-methyl-1H-1,2,4-triazol-5-yl)-2-(4-pyridinyl)-1}$

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 16 OF 21 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:220577 CAPLUS

DOCUMENT NUMBER: 136:247579

TITLE: Preparation of pyrazolamines and analogs as protein kinase inhibitors for treatment of cancer, diabetes,

and Alzheimer's disease

INVENTOR(S): Knegtel, Ronald; Bebbington, David; Binch, Hayley;
Golec, Julian; Patel, Sanjay; Charrier, Jean-Damien;

Kay, David; Davies, Robert; Li, Pan; Wannamaker,

Marion; Forster, Cornelia; Pierce, Albert

PATENT ASSIGNEE(S): Vertex Pharmaceuticals Incorporated, USA

SOURCE: PCT Int. Appl., 376 pp.

CODEN: PIXXD2 Patent

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 14

PATENT INFORMATION:

PAT	ENT :	NO.			KIN	D	DATE			APPL	ICAT	ION :	NO.		D.	ATE			
	2002				A1	-	2002	0321	WO 2001-US28740						20010914 <				
		AE, CO, GM, LS, PT,	AG, CR, HR, LT, RO,	AL, CU, HU, LU, RU,	AM, CZ, ID, LV, SD,	AT, DE, IL, MA, SE,	AU, DK, IN, MD, SG,	AZ, DM, IS, MG,	BA, DZ, JP, MK,	BB, EC, KE, MN,	BG, EE, KG, MW,	BR, ES, KP, MX,	BY, FI, KR, MZ,	BZ, GB, KZ, NO,	CA, GD, LC, NZ,	CH, GE, LK, PH,	CN, GH, LR, PL,		
	RW:	GH, DE,	DK,	KE, ES,	LS, FI,	MW, FR,	MZ, GB, GA,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,			
CA	2422																914 <		
AU	2001	0909	14		A		2002	0326		AU 2	001-	9091	4		2	0010	914 <		
US	2003	0055	044		A1		2003	0320		US 2	001-	9535	05		2	0010	914 <		
US	6638	926			B2		2003	1028											
	2003						2003			US 2	001-	9528	36		2	0010	914 <		
US	6613 2003 7473	0064	982		B2 A1 B2		2003 2003 2009	0403		US 2	001-	9528	75		2	0010	914 <		
US	2003	0073	687		A1		2003	0417		US 2	001-	9526	71		2	0010	914 <		

US 6660731 US 20030078166 US 6696452 US 20030083327 US 6610677 EP 1317444 EP 1317444		B2	20031209	
US 20030078166		A1	20030424	US 2001-955601 20010914 <
US 6696452		B2	20040224	
US 20030083327		A1	20030501	US 2001-952833 20010914 <
US 6610677		B2	20030826	
EP 1317444		A1	20030611	EP 2001-970971 20010914 <
EP 1317444		В1	20060531	
K: A1, BE,	CH,	DE,	DK, ES, FK,	GB, GR, II, LI, LU, NL, SE, MC, PI,
IE, SI,	LT,	LV,	FI, RO, MK,	CY, AL, TR
ZA 2003001701		A	20040301	ZA 2003-1701 20010914 <
ZA 2003001703		A	20040302	ZA 2003-1703 20010914 <
JP 2004509113		Т	20040325	JP 2002-526854 20010914 <
JP 4111824		B2	20080702	
US 20040097501		A1	20040520	US 2001-9534/1 20010914 <
US 7115739		B2	20061003	
US 20050004110		AI	20050106	US 2001-952878 20010914 <
US 7098330		B2	20060829	EC 2001 071006 20010014 4
ES 2242771		13	20051116	ES 2001-9/1006 20010914 <
AI 326458		1	20060615	AI 2001-970969 20010914 <
MI 32/990		T	20060615	AI 2001-970971 20010914 <
AI 32/992		7	20060615	AI 2001-9/1082 20010914 <
AI 32/991		T	20060615	AT 2001-973030 20010914 <
ED 1600627		7.1	20060613	CY, AL, TR ZA 2003-1701 20010914 < ZA 2003-1703 20010914 < JP 2002-526854 20010914 < US 2001-953471 20010914 < US 2001-952878 20010914 < ES 2001-971006 20010914 < AT 2001-970969 20010914 < AT 2001-970971 20010914 < AT 2001-971082 20010914 < AT 2001-971082 20010914 < AT 2001-977779 20010914 < EN 2005-10798 20010914 < EN
R: AT, BE,	CH	DE.	20000900	GB, GR, IT, LI, LU, NL, SE, MC, PT,
R: AI, DE,	LT,	DE,	FI, RO, MK,	CV 31 TD
AT 346064	ш.,	т,	20061215	AT 2001_975210 20010914 <
ES 2266258		T3	20001213	ES 2001-970971 20010914 <
ES 2266259		Т3	20070301	ES 2001-971082 20010914 <
AT 363284		т	20070501	AT 2001-977783 20010914 <
NZ 545284		Ã	20070629	NZ 1984-5452 20010914 <
CN 100355750		C	20071219	CN 2001-817427 20010914 <
CA 2432303		A1	20020829	CA 2001-2432303 20011219 <
AU 2002255452		A1	20020904	AU 2002-255452 20011219 <
AU 2002255452		B2	20060608	
CA 2432223		A1	20020906	CA 2001-2432223 20011219 <
CA 2432223		С	20080520	
AU 2001297619		A1	20020912	AU 2001-297619 20011219 <
AU 2001297619		B2	20060608	
EP 1345922		A1	20030924	EP 2001-271061 20011219 <
EP 1345922		B1	20060531	CY, AL, TR AT 2001-975210 ES 2001-970812 ES 2001-971082 AT 2001-971783 AT 2001-971783 AT 2001-971783 CN 2001-817427 CN 2001-817427 CN 2001-24322303 AU 2002-255452 AU 2002-255452 AU 2001-2432223 AU 2001-2432223 CA 2001-2432223 CA 2001-243223 CA 2001-243230 CA 2001-243223 CA 2001-243230 CA 2001-243230
IE, SI,	LT,	LV,	FI, RO, MK,	CY, AL, TR
EP 1355905 EP 1355905		A1		EP 2001-273861 20011219 <
		B1		
R: AT, BE,	CH,	DE,	DK, ES, FR,	GB, GR, IT, LI, LU, NL, SE, MC, PT, CY, AL, TR
IE, SI,	LT,	LV,	FI, RO, MK,	CY, AL, TR
NZ 526472		A	20040430	NZ 2001-526472 20011219 <
JP 2004518743		T	20040624	JP 2002-565976 20011219 <
JP 2004519479		Т	20040702	JP 2002-567928 20011219 <
JP 4234435		R2	20090304	
HU 2004000842				
ME CACADO		A2	20040728	HU 2004-842 20011219 <
NZ 526473		A2 A	20040728 20050624	HU 2004-842 20011219 < NZ 2001-526473 20011219 <
NZ 526473 EP 1702920	011	A2 A A1	20040728 20050624 20060920	HU 2004-842 20011219 < NZ 2001-526473 20011219 < EP 2006-11799 20011219 <
K: AI, BE,	Cn,	DE,	DE, ES, EK,	MZ 2001-526472 20011219 < JP 2002-565976 20011219 < JP 2002-567928 20011219 < HU 2004-842 20011219 < EP 2006-611799 20011219 < GB, GR, IT, LI, LU, NL, SE, MC, PT,
K: AI, DE,	LT.	DE,	DR, ES, FK,	CV M TD
K: AI, DE,	LT.	DE,	DR, ES, FK,	CV M TD
K: AI, DE,	LT.	DE,	DR, ES, FK,	CV M TD
K: AI, DE,	LT.	DE,	DR, ES, FK,	CV M TD
K: AI, DE,	LT.	DE,	DR, ES, FK,	CV M TD
K: AI, DE,	LT.	DE,	DR, ES, FK,	GB, GR, II, LI, LU, NL, SE, MC, FI,

MX 2003002294	A	20050908	MX 2003-2294	20030317 <
ZA 2003004468	A	20040624	ZA 2003-4468	20030609 <
ZA 2003004469	A	20040624	ZA 2003-4469	20030609 <
ZA 2003004470	A	20040624	ZA 2003-4470	20030609 <
ZA 2003004471	A	20040624	ZA 2003-4471	20030609 <
	A	20040624	ZA 2003-4473	
ZA 2003004475	A	20040624	ZA 2003-4475	20030609 <
ZA 2003004472	A	20040625	ZA 2003-4472	20030609 <
ZA 2003004474	A	20040625	ZA 2003-4474	20030609 <
NO 2003002704	A	20030821	NO 2003-2704	20030613 <
MX 2003005609	A	20031006	MX 2003-5609	20030620 <
MX 2003005610	A	20031006	MX 2003-5610	20030620 <
US 20040224944	A1	20041111	US 2003-624800	20030722 <
US 7008948	B2	20060307		
US 20040116454	A1	20040617	US 2003-692355	20031023 <
US 7390815	B2	20080624		
HK 1057543	A1	20061215	HK 2003-108309	20031114 <
US 20040157893	A1	20040812	US 2003-722374	20031125 <
US 20040132781	A1	20040708	US 2003-736426	20031215 <
US 7087603	B2	20060808	05 2005-750420	20031213 <
US 20040167141	A1	20040826	US 2004-775699	20040210 <
			05 2004-775699	20040210 <
US 7427681	B2	20080923		00010015
HK 1060347	A1	20061201	HK 2004-101883	20040315 <
JP 2005097322	A	20050414	JP 2004-366925	20041217 <
US 20070270444	A1	20071122	US 2006-369220	20060306 <
AU 2006201228	A1	20060413	AU 2006-201228	20060321 <
AU 2006201229	A1	20060413	AU 2006-201229	20060321 <
AU 2006201229	B2	20081120		
AU 2006201230	A1	20060413	AU 2006-201230	20060321 <
AU 2006201230	B2	20080911		
AU 2006201262	A1	20060427	AU 2006-201262	20060321 <
AU 2006201262	B2	20080904		
AU 2006201263	A1	20060427	AU 2006-201263	20060321 <
AU 2006201263	B2	20081030		
AU 2006201264	A1	20060427	AU 2006-201264	20060321 <
AU 2006201265	A1	20060427	AU 2006-201265	20060321 <
	B2		AU 2000-201203	20000321 <
		20080904	377 0006 001006	20060404
AU 2006201396	A1	20060504	AU 2006-201396	20060404 <
AU 2006201396	B2	20081002		
US 20060258658	A1	20061116	US 2006-492450	20060725 <
IN 2007KN02703	A	20080801	IN 2007-KN2703	20070723 <
JP 2008115195	A	20080522	JP 2008-15681	20080125 <
JP 2008189682	A	20080821	JP 2008-95581	20080401 <
JP 2008260767	A	20081030	JP 2008-95584	20080401 <
JP 2008222719	A	20080925	JP 2008-97620	20080403 <
JP 2008189687	A	20080821	JP 2008-98506	20080404 <
US 20080287444	A1	20081120	US 2008-109598	20080425
JP 2008201808	A	20080904	JP 2008-121723	20080507 <
JP 2008247920	A	20081016	JP 2008-121724	20080507 <
JP 2008247921	A	20081016	JP 2008-121727	20080507 <
AU 2008252044	A1	20090122	AU 2008-252044	20081203 <
PRIORITY APPLN. INFO.:			US 2000-232795P	P 20000915 <
			US 2000-257887P	P 20001221 <
			US 2001-286949P	P 20010427 <
			AU 2001-296871	A3 20010914 <
			AU 2001-296875	A3 20010914 <
			AU 2001-90914	A3 20010914 <
			AU 2001-90944	A3 20010914 <
			AU 2001-91013	A3 20010914 <
			AU 2001-94558	A3 20010914 <
			AU 2001-96871	T0 20010914 <
			AU 2001-96875	TO 20010914 <

EP	2001-971082	А3	20010914	<
JP	2002-526860	A3	20010914	<
US	2001-952671	A3	20010914	<
US	2001-953471	A3	20010914	<
US	2001-955601	A3	20010914	<
WO	2001-US28740	W	20010914	<
AU	2002-234047	АЗ	20011219	<
AU	2002-34047	T0	20011219	<
EP	2001-273861	Α	20011219	<
EP	2001-994323	A3	20011219	<
JP	2002-551561	A3	20011219	<
JP	2002-557938	АЗ	20011219	<
JP	2002-559413	A3	20011219	<
JP	2002-563142	A3	20011219	<
JP	2002-565976	A3	20011219	<
JP	2002-567928	A3	20011219	<
US	2001-26966	A1	20011219	<
WO	2001-US49139	W	20011219	<
WO	2001-US50312	W	20011219	<
JP	2002-551562	A3	20011220	<
JP	2002-559414	A3	20011220	<
US	2001-34019	A3	20011220	<
US	2001-34683	A1	20011220	<
IN	2003-KN795	A3	20030619	<
US	2003-624800	A3	20030722	<
US	2004-775699	A1	20040210	
AU	2006-201396	A3	20060404	

OTHER SOURCE(S): MARPAT 136:247579
GI

AB Title compds. I [wherein G = Ring C or Ring D; Ring C = (un) substituted Ph. pyridinyl, pyriadizinyl, Ring D = (un) substituted monocyclic or bicyclic ring selected from aryl, heteroaryl, heteroaryl, heteroaryl, pyriadizinyl, pyriadiziny

NR4COR, NR4CO2(aliphatic), NR4M(R4)2, C:NN(R4)2, C:NOR, NR4CO(R4)2, NR4SO2N(R4)2, NR4SO2N, or OCON(R4)2; R4 = R7, COR7, CO2(aliphatic), CON(R7)2, or SO2R7; or N(R4)2 = heterocyclyl or heteroaryl; R6 and R7 = independently H or (un)substituted aliphatic group; or N(R6)2 = heterocyclyl or heteroaryl; or N(R7)2 = heterocyclyl or heteroaryl; R9 = R, halo, OR, COR, CO2R, COCR, CO2R, COCR, CO2R, COCR, CO2R, COCR, CO2R, COCR, COC

inhibitors of Aurora-2 and GSK-3, for treating diseases such as cancer, diabetes, and Alzheimer's disease. Claims cover pyrimidinyl- and pyridinyl- pyrazolamines and indazolamines I [wherein Z1 = N, CRa, or CH; Z2 = N or CH; and at least one of Z1 or Z2 = N; Z3 = CKx; Z4 = CKy; Ra = halo, OR, COR, COX, COXOR, OXOZ, CN, SOO-ZR, N(R4)2, CON(R4)2, SOZN(R4)2, OCOR, NR4COR, etc.; R and R4 are defined above]. Examples include data for approx. 300 invention compds. prepared by a variety of synthetic methods and bloassay results for the inhibition of GSK- β 3, Aurora-2, ERK, and S7c. For instance, the N-(4-pyrimidinyl)-3-pyrazolamine II was prepared and exhibited Ki values of < 0.1 μ M for glycogen synthetase kinase 3 β (GSK-33) and 0.1-1.0 μ M for Aurora-2.

IT 404828-10-0P, (5-Methyl-2H-pyrazol-3-yl)(2-pyridin-4-ylquinazolin-4-yl)-amine 404828-11-1P, (7-Chloro-2-pyridin-4-ylquinazolin-4-yl)(5-methyl-2H-pyrazol-3-yl)amine 404828-12-2P, (6-Chloro-2-pyridin-4-ylquinazolin-4-yl)(5-methyl-2Hpyrazol-3-yl)amine 404828-45-1P,

[22-Pyrazol-3-y1](2-pyridin-4-ylquinazolin-4-yl]amine 404828-50-8P , (5-tert-Butyl-2H-pyrazol-3-y1)(2-pyridin-4-yl]amine Rl: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(protein kinase inhibitor; preparation of heterocyclylpyrazolamines and analogs as protein kinase inhibitors for treatment of cancer, diabetes, and Alzheimer's disease)

404828-10-0 CAPLUS

4-Quinazolinamine, N-(5-methyl-1H-pyrazol-3-yl)-2-(4-pyridinyl)- (CA INDEX NAME)

as

RN CN

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 404828-11-1 CAPLUS

CN 4-Quinazolinamine, 7-chloro-N-(5-methyl-1H-pyrazol-3-yl)-2-(4-pyridinyl)-(CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 404828-12-2 CAPLUS

CN 4-Quinazolinamine, 6-chloro-N-(5-methyl-1H-pyrazol-3-yl)-2-(4-pyridinyl)-(CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 404828-45-1 CAPLUS

CN 4-Quinazolinamine, N-1H-pyrazol-3-yl-2-(4-pyridinyl)- (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 404828-50-8 CAPLUS

 pyridinyl) - (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 17 OF 21 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:158388 CAPLUS

DOCUMENT NUMBER: 136:200203

TITLE: Preparation of 4-aminoquinazolines for use in inhibiting neoplastic cells and related conditions

INVENTOR(S): Pamukcu, Rifat; Piazza, Gary

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 23 pp., Cont. of U.S. Ser. No.

60,444, abandoned.

CODEN: USXXCO
DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

GI MARPAT 136:20020:

$$(\mathbb{R}^4)_n \xrightarrow{\qquad \qquad N \qquad \qquad } \mathbb{R}^2 = \mathbb{R}^3 = \mathbb{R}^4$$

AB Title compds. I [wherein R] = H or alkyl; Y = alkylene; A = ORa or S(0)PRa; Ra = alkylhydroxy; p = 0-2; Z = single bond, methylene, ethylene, vinylene, or ethynylene; CyB = heterocyclic ring; R3 = H, alkyl, alkoxy, halo, or CF3; R4 = H, alkyl, alkoxy, CO2H, carboxy ester, alkanoylamino, alkylsulfonylamino, alkylsulfinyla, alkylsulfonylamino, alkylsulfinyla, alkylsulfonyl, ethynyl, hydroxymethyl, acetyl, or (un)substituted sulfamoyl, carbamoyl, etc.; m and n = independently 1-2; or pharmaceutically acceptable salts or hydrates thereof) were prepared for inhibiting neoplastic cells and related conditions. For example, amination of 2,4-dichloro-6-(2-triethylsilylethynyl)quinazolin-2,4-dione (preparation given) with 2-methoxyethylamine in CHCl3, followed by addition of imidazole in EtOH and deprotection using NBusf, afforded II. I are useful in the treatment of precancerous and cancerous lesions, including malignant melanomas, breast cancer, and colon cancer (no data).

IT 1102370-13-7

RN

RL: PRPH (Prophetic) (Preparation of 4-aminoquinazolines for use in inhibiting neoplastic cells and related conditions) 1102370-13-7 CAPLUS

CN 4-Quinazolinamine, N-methyl-N-phenyl-2-(4-pyridinyl)-, hydrochloride (1:2) (CA INDEX NAME)

●2 HC1

ACCESSION NUMBER: 2000:161275 CAPLUS DOCUMENT NUMBER: 132:194387

TITLE: Preparation of quinazolines as $p38-\alpha$ kinase and

TGF-β inhibitors

PATENT ASSIGNEE(S): Scios Inc., USA

SOURCE: PCT Int. Appl., 48 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

	TENT N																	
WO	WO 2000012497 WO 2000012497							WO 1999-US19846										
	W:	ΑE,	AL,	AU,	BA,	BB,	BG,	BR,	CA,	CN,	CR,	CU,	CZ,	EE,	GE,	HU,	IL,	
		IN,	IS,	JP,	KP,	KR,	LC,	LK,	LR,	LT,	LV,	MG,	MK,	MN,	MX,	NO,	NZ,	
		PL,	RO,	SG,	SI,	SK,	TR,	TT,	UA,	US,	UZ,	VN,	ZA,	AM,	AZ,	BY,	KG,	
		ΚZ,	MD,	RU,	ТJ,	TM												
	RW:	GH,	GM,	KE,	LS,	MW,	SD,	SL,	SZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,	DE,	DK,	
		ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ΒJ,	CF,	CG,	
											TD,							
US	61842	226			B1		2001	0206		US I	1998-	1419	16		1	9980	828	
CA	23422	250			A1		2000	0309		CA 1	1999-	2342	250		1			
AU	99624 77194	113			A		2000	0321		AU 1	1999-	6241	3		1	9990	827	<
AU	77194	17			B2		2004	0408										
	11079									EP 1	1999-	9495	68		1	9990	827	<
	11079																	
	R:								GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
		IE,	SI,	LT,	LV,	FI,	RO,	CY										
BR	99136	548			A		2002	0102		BR 1	1999-	1364	8		1	9990	827	<
JP	20025	2350	02		Т		2002	0730		JP 2	2000-	5675	25		1	9990	827	<
CN	99136 20025 11528 34225	367			С		2004	0609		CN 1	1999-	8116	59		1	9990	827	<
AT	34225	06			T		2006	1115		AT I	1999-	9495	68		1	9990	827	<
ES	22746	42			Т3		2007	0516		ES I	1999-	9495	68		1	9990	827	<
MX	20010	0021	/5		A		2003	0714		MX 2	2001-	2175			2	0010	228	<
	10358				A1		2007	0601										
PRIORIT:	Y APPI	N.	INFO	. :							1998-							
OTHER SO	OURCE ((S):			MAR	PAT	132:	1943		WO 1	1999-	US19	846		w 1	9990	827	<

AB Title compds. [I; $R=ZRI_1$ RI = (un)substituted cyclic (hetero)aliphatic group, -(hetero)aryl, R3 = noninterfering substituent (sic); RRS = atoms to complete a 6-membered aromatic ring containing 0, 1, or 2 nonadjacent N atoms

and noninterfering substituent(s) (sic); z = bond or linker (sic); Z3 = CR2 or N; R2 = noninterfering substituent (sic)] were prepared Thus, prepn

of, e.g., 4-(4-pyridinylamino)-2-phenylquinazoline was described. Data for biol. activity of I were given.

IT 474289-44-6

RL: PRPH (Prophetic)

(Preparation of quinazolines as $p38-\alpha$ kinase and TGF- β inhibitors)

RN 474289-44-6 CAPLUS

CN 4-Quinazolinamine, N, 2-di-4-pyridinyl- (CA INDEX NAME)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD, ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 19 OF 21 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1995:795361 CAPLUS

DOCUMENT NUMBER: 124:29779

ORIGINAL REFERENCE NO.: 124:5715a,5718a

TITLE: 4-Aminoquinazoline derivatives as inhibitors of cGMP

phosphodiesterase and TXA2 synthetase
INVENTOR(S): Lee, Sung J.; Konishi, Yoshitaka; Macina, Orest T.;

Kondo, Kigen; Yu, Dingwei T.

PATENT ASSIGNEE(S): One Pharmaceutical Co., Ltd., Japan

U.S., 42 pp. Cont.-in-part of U.S. Ser. No. 76,431, abandoned.

CODEN: USXXAM
DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

SOURCE:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
US 5439895	A	19950808	US 1993-154691	19931119 <	
JP 06192235	A	19940712	JP 1993-197039	19930714 <	
CA 2100626	A1	19940116	CA 1993-2100626	19930715 <	
KR 191416	B1	19990615	KR 1993-13549	19930715 <	
AT 208771	T	20011115	AT 1993-305557	19930715 <	
ES 2167325	T3	20020516	ES 1993-305557	19930715 <	
JP 08099962	A	19960416	JP 1995-264667	19950920 <	
JP 2923742	B2	19990726			
PRIORITY APPLN. INFO.:			US 1992-913473	B2 19920715 <	
			US 1993-76431	B2 19930614 <	
OTHER SOURCE(S):	MARPAT	124:29779			

AB The compds. of the formula I and acid addition salts thereof, salts thereof, and hydrates thereof wherein R1 is hydrogen or C1-4 alkyl; Y is C1-6 alkylene; A is ORO or S(O)pRO, in which RO is C1-4 alkyl-hydroxy; p is 0-2; Z is single bond, methylene, ethylene, vinylene or ethynylene; CyB is (1) 7-membered, unsatd. or partially saturated, monocyclic hetero ring containing

TT

as hetero atoms, one, two or three nitrogen atoms, (2) 6-membered, unsatd. or partially saturated, monocyclic hetero ring containing as hetero atoms, two

three nitrogen atoms, (3) 6-membered, unsatd. or partially saturated, monocyclic hetero ring containing as hetero atom, one nitrogen atom, (4) 4- or 5-membered, unsatd. or partially saturated, monocyclic hetero ring containing

hetero atoms, one, two or three nitrogen atoms, or (5) 4-7 membered, unsatd. or partially saturated, monocyclic hetero ring containing as hetero atoms,

one or two oxygen atoms, or one or two sulfur atoms; R3 = e.g., H, C1-4 alkyl, C1-4 alkoxy; R4 = e.g., H, C1-4 alkyl, C1-4 alkoxy; and m and n independently are 1 or 2; with the proviso that (1) a CyB ring does not bond to Z through a nitrogen atom in the CyB ring when Z is vinylene or ethynylene, have inhibitory effect on cGMP-PDE, and addnl. on TXA2 synthetase. Thus, e.g., 2-(1-imidazolyl)-4-[2-(2-hydroxyethoxylethyl]amino-6-ethynylquinazoline.2HCl (II.2HCl) (prepared by desilvlation of a silvlacetylene precursor) exhibited inhibitory effect on

cGMP-PDE and TXA2 synthetase with IC50 = 4.6 + 10-8 M and 1.33 + 10-6 M, resp. Pharmaceutical formulations were given.

IT 157862-97-0P 157862-98-1P

as

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(4-aminoquinazoline derivs. as inhibitors of cGMP phosphodiesterase and TXA2 synthetase)

157862-97-0 CAPLUS

CN 4-Quinazolinamine, N-(phenylmethyl)-2-(4-pyridinyl)- (CA INDEX NAME)

157862-98-1 CAPLUS

CN 4-Quinazolinamine, N-(phenylmethyl)-2-(4-pyridinyl)-, hydrochloride (1:2) (CA INDEX NAME)

● 2 HC1

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 20 OF 21 CAPLUS COPYRIGHT 2009 ACS on STN

1995:761961 CAPLUS ACCESSION NUMBER: DOCUMENT NUMBER: 123:340173

ORIGINAL REFERENCE NO.: 123:61059a,61062a TITLE: 4-Aminoquinazoline derivatives as inhibitors of cyclic

guanosine 3',5'-monophosphate phosphodiesterase and

thromboxane A2 synthetase

INVENTOR(S): Lee, Sung J.; Konishi, Yoshitaka; Macina, Orest T.;

Kondo, Kigen; Yu, Dingwei T.

PATENT ASSIGNEE(S): Ono Pharmaceutical Co., Ltd., Japan abandoned.

SOURCE: U.S., 44 pp. Cont.-in-part of U.S. Ser. No. 76,431,

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE	
				-		
US 5436233	A	19950725	US 1993-154518		19931119	<
JP 06192235	A	19940712	JP 1993-197039		19930714	<
CA 2100626	A1	19940116	CA 1993-2100626		19930715	<
KR 191416	B1	19990615	KR 1993-13549		19930715	<
AT 208771	T	20011115	AT 1993-305557		19930715	<
ES 2167325	T3	20020516	ES 1993-305557		19930715	<
JP 08099962	A	19960416	JP 1995-264667		19950920	<
JP 2923742	B2	19990726				
PRIORITY APPLN. INFO.:			US 1992-913473	B2	19920715	<
			US 1993-76431	B2	19930614	<
OWNED COURSE (C)	OR ODD	om 100 0401	70 MADDAM 100 040170			

OTHER SOURCE(S): CASREACT 123:340173; MARPAT 123:340173

GI

AB Title compds. I [RI is H, C1-4 alkyl; Y is a single bond or C1-6 alkylene; A is (i) CyA-(R2)l, (ii) OR0 or S(O)pR0 in which R0 is R0A or R0B; R0A is CyA-(R2)l; R0B is H or C1-4 alkyl; p is 0-2; CyA is, e.g., (1) 3-7 membered, saturated or unsatd., monocyclic carbocyclic ring, (2) 7-membered, unsatd. or partially saturated, monocyclic heter ring containing as hetero

atoms,

one nitrogen atom, one nitrogen and one oxygen atoms, two nitrogen and one oxygen atoms, or one nitrogen and two oxygen atoms, (3) 6-membered, unsatd. or partially saturated, monocyclic hetero ring containing as hetero

atoms,

one nitrogen and one oxygen atoms, two nitrogen and one oxygen atoms, or one nitrogen and two oxygen atoms; R2 is R2A or R2B; R2A is, e.g., CF3, OCF3; R2B is, e.g., H, Cl-4 alkyl, Cl-4 alkoxy; Z is ZA or ZB, ZA is methylene, ethylene, vinylene, ethynylene; ZB is a single bond; CyB is, e.g., (1) "-membered, unsatd or partially saturated, monocyclic hetero ring containing as hetero atoms, one, two or three nitrogen atoms, (2) 6-membered, unsatd. or partially saturated, monocyclic hetero ring containing as hetero

atoms,

RN

two or three nitrogen atoms, (3) 6-membered, unsatd. or partially saturated, monocyclic hetero ring containing as a hetero atom, one nitrogen atom; R3 = e.g., H, C1-4 alkyl; R4 = e.g., NHSOZR11, R11 = e.g., C1-4 alkyl; l, m, n are independently l or 2 (with provisos)] are provided as inhibitors of cGMP-PDE and TXA2 synthetase. Thus, e.g., treatment of 2-(1-midazolyl)-4-(2-methoxyethyl)amino-6-(2-triehylailylethynyl)quinazoline (preparation given) with tetrabutylammonium fluoride afforded 6-ethynyl-4-(2-methoxyethyl)amino-2-(1-middazolyl)quinazoline (II); II.3HCl demonstrated inhibition of cGMP-PDE with and TXA2 synthetase with ICS0 = 4.6 + 10-8 and 2.4 + 10-6 M, resp. Pharmaceutical formulations were given.

IT 157862-97-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (4-aminoquinazollam derivs. as inhibitors of cyclic quanosine

(4-aminoquinazoline derivs. as inhibitors of cyclic guanosine 3/,57-monophosphate phosphodiesterase and thromboxane A2 synthetase) 157862-97-0 CAPLUS

CN 4-Quinazolinamine, N-(phenylmethyl)-2-(4-pyridinyl)- (CA INDEX NAME)

T 157862-98-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);

BIOL (Biological study); PREP (Preparation); USES (Uses)

(4-aminoquinazoline derivs. as inhibitors of cyclic guanosine

3',5'-monophosphate phosphodiesterase and thromboxane A2 synthetase)

4-Quinazolinamine, N-(phenylmethyl)-2-(4-pyridinyl)-, hydrochloride (1:2) (CA INDEX NAME)

RN

CN

●2 HC1

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 21 OF 21 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1994:605373 CAPLUS

DOCUMENT NUMBER: 121:205373 ORIGINAL REFERENCE NO.: 121:37397a,37400a

TITLE: 4-aminoquinazoline derivatives, and their use as

medicine

INVENTOR(S): Lee, Sung Jai; Konishi, Yoshitaka; Macina, Orest

Taras; Kondo, Kigen; Yu, Dingwei Tim
PATENT ASSIGNEE(S): Ono Pharmaceutical Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 86 pp.

SOURCE: Eur. Pat. Appl., 86
CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 579496	A1	19940119	EP 1993-305557	19930715 <
EP 579496	B1	20011114		
R: AT, BE, CH,	DE, DK	, ES, FR, GE	B, GR, IE, IT, LI, LU,	MC, NL, PT, SE
JP 06192235	A	19940712	JP 1993-197039	19930714 <
CA 2100626	A1	19940116	CA 1993-2100626	19930715 <
KR 191416	B1	19990615	KR 1993-13549	19930715 <
AT 208771	T	20011115	AT 1993-305557	19930715 <
ES 2167325	Т3	20020516	ES 1993-305557	19930715 <
JP 08099962	A	19960416	JP 1995-264667	19950920 <
JP 2923742	B2	19990726		
PRIORITY APPLN. INFO.:			US 1992-913473	A 19920715 <
			US 1993-76431	A 19930614 <
OTHER COURCE (C).	MADDAT	101.005272		

OTHER SOURCE(S): MARPAT 121:205373

GI

AB The title compds. I wherein R1 is H or alkyl; Y is bond or alkylene; A is (i) -CyAR2, (ii) -OR0 or -S(O)pR0, R0 = H, alkyl, etc., p is 0-2, (iii) -NR16R17, R16, R17 are H, alkyl; CyA is (1) a 3-7 membered monocyclic carbocyclic ring, (2) a 4-7 membered monocyclic hetero ring containing as hetero atoms, one N atom, one N and one O atoms, two N and one O atoms, or one N and two O atoms, (3) a 4-7 membered monocyclic hetero ring containing as hetero atoms, 1 or 2 O or S atoms, R2 is (1) H, (2) alkyl, (3) alkoxy, (4) -COOR5, in which R5 is H or alkyl, (5) -NR6R7, R6, R7 are H, alkyl, (6) -SO2NR6R7, (7) halogen, (8) CF3, (9) NO2 or (10) CF3O; Z is bond, methylene, ethylene, vinylene or ethynylene; CvB is a heterocyclic ring; R3 is H, alkyl, alkoxy, halogen or CF3; R4 is H, alkyl, alkoxy, etc., and acid addition salts thereof, salts thereof, and hydrates thereof were prepared and have inhibitory effect on cGMP-PDE, or addnl. on TXA2 synthetase. Thus, a representative prepared compound II had inhibitory activity IC50 of 3.6 x 10-7 on cGMP-PDE.

II 157862-97-0P 157862-98-1P
RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, as cardiovascular agents) 157862-97-0 CAPLUS

CN 4-Quinazolinamine, N-(phenylmethyl)-2-(4-pyridinyl)- (CA INDEX NAME)

RN

RN 157862-98-1 CAPLUS

CN 4-Quinazolinamine, N-(phenylmethyl)-2-(4-pyridinyl)-, hydrochloride (1:2) (CA INDEX NAME)

●2 HC1

=> fil stnguide SINCE FILE TOTAL ENTRY SESSION COST IN U.S. DOLLARS FILL ESTIMATED COST 121.68 584.31 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION

-17.22

-27.06

FILE 'STNGUIDE' ENTERED AT 18:12:09 ON 24 APR 2009 USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Apr 17, 2009 (20090417/UP).

=> FIL STNGHIDE

CA SUBSCRIBER PRICE

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION 0.63 584.94 FULL ESTIMATED COST DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL SESSION ENTRY 0.00 -27.06 CA SUBSCRIBER PRICE

FILE 'STNGUIDE' ENTERED AT 18:17:40 ON 24 APR 2009 USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

FILE CONTAINS CURRENT INFORMATION. LAST RELOADED: Apr 17, 2009 (20090417/UP).

=> LOGOFF

ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF LOGOFF? (Y) /N/HOLD: U

'U' IS NOT VALID HERE

For an explanation, enter "HELP LOGOFF".

=> Y

Y IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system. For a list of commands available to you in the current file, enter "HELP COMMANDS" at an arrow prompt (=>).

=> LOGOFF

ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF LOGOFF? (Y) /N/HOLD: Y

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 0.28 585.22 TOTAL DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE ENTRY SESSION 0.00 CA SUBSCRIBER PRICE -27.06

STN INTERNATIONAL LOGOFF AT 18:20:07 ON 24 APR 2009

LOGINID:SSPTABEM1624

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * *	* *	* *	* *	* Welcome to STN International * * * * * * * * * * *
NEWS	1			Web Page for STN Seminar Schedule - N. America
NEWS	2	DEC	01	ChemPort single article sales feature unavailable
NEWS	3	JAN	06	The retention policy for unread STNmail messages
				will change in 2009 for STN-Columbus and STN-Tokyo
NEWS	4	JAN	0.7	WPIDS, WPINDEX, and WPIX enhanced Japanese Patent
				Classification Data
NEWS	5	FEB	0.2	Simultaneous left and right truncation (SLART) added
	-			for CERAB, COMPUAB, ELCOM, and SOLIDSTATE
NEWS	6	FEB	02	GENBANK enhanced with SET PLURALS and SET SPELLING
NEWS	7	FEB		Patent sequence location (PSL) data added to USGENE
NEWS	8	FEB		COMPENDEX reloaded and enhanced
NEWS	9	FEB		WTEXTILES reloaded and enhanced
NEWS	10	FEB	19	New patent-examiner citations in 300,000 CA/CAplus
				patent records provide insights into related prior art
NEWS	11	FEB	19	Increase the precision of your patent queries use
				terms from the IPC Thesaurus, Version 2009.01
NEWS	12	FEB	23	Several formats for image display and print options
				discontinued in USPATFULL and USPAT2
NEWS	13	FEB	23	MEDLINE now offers more precise author group fields
				and 2009 MeSH terms
NEWS	14	FEB	23	TOXCENTER updates mirror those of MEDLINE - more
				precise author group fields and 2009 MeSH terms
NEWS	15	FEB	23	Three million new patent records blast AEROSPACE into
				STN patent clusters
NEWS	16	FEB	25	USGENE enhanced with patent family and legal status
				display data from INPADOCDB
NEWS	17	MAR	06	INPADOCDB and INPAFAMDB enhanced with new display
				formats
NEWS	18	MAR	11	EPFULL backfile enhanced with additional full-text
				applications and grants
NEWS		MAR		ESBIOBASE reloaded and enhanced
NEWS	20	MAR	20	CAS databases on STN enhanced with new super role
				for nanomaterial substances
NEWS	21	MAR	23	CA/CAplus enhanced with more than 250,000 patent
				equivalents from China
NEWS		MAR		IMSPATENTS reloaded and enhanced
NEWS	23	APR	03	CAS coverage of exemplified prophetic substances
NETTO	0.4	3.00	0.7	enhanced
NEWS		APR		STN is raising the limits on saved answers
NEWS	25	APR	24	CA/CAplus now has more comprehensive patent assignee information
NEWS	20	APR	20	
NEWS	∠0	MPR	∠0	USPATFULL and USPAT2 enhanced with patent assignment/reassignment information
NEWS	27	APR	20	CAS patent authority coverage expanded
NEWS		APR		ENCOMPLIT/ENCOMPLIT2 search fields enhanced
NEWS		APR		Limits doubled for structure searching in CAS
MEMP	25	AFK	20	REGISTRY
				REGISTRI

AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS LOGIN Welcome Banner and News Items

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN customer agreement. This agreement limits use to scientific research. Use for software development or design, implementation of commercial gateways, or use of CAS and STN data in the building of commercial products is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 15:28:05 ON 28 APR 2009

=> fil reg

COST IN U.S. DOLLARS
FULL ESTIMATED COST

SINCE FILE TOTAL ENTRY SESSION 0.22 0.22

FILE 'REGISTRY' ENTERED AT 15:28:23 ON 28 APR 2009 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2009 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 26 APR 2009 HIGHEST RN 1139453-56-7
DICTIONARY FILE UPDATES: 26 APR 2009 HIGHEST RN 1139453-56-7

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2009.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>

Uploading C:\Program Files\STNEXP\Queries\10552426pryim.str





```
19
ring nodes :
1 2 3 4 5 6 7 8 9 10 12 13 14 15 16 17 21 22 23 24 25
ring/chain nodes :
18
chain bonds :
7-18 9-12 18-19 18-21
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 12-13 12-17 13-14 14-15
15-16 16-17 21-22 21-25 22-23 23-24 24-25
exact/norm bonds :
7-18 18-19 18-21 21-22 21-25 22-23 23-24 24-25
exact bonds :
9-12
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 12-13 12-17 13-14 14-15
15-16 16-17
isolated ring systems :
containing 1 : 12 :
```

G1:Hy,Ak

chain nodes :

Match level: 1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:CLASS 19:Atom 21:Atom 22:Atom 23:Atom 24:Atom 25:Atom

L1 STRUCTURE UPLOADED

=> d l1 L1 HAS NO ANSWERS L1 STR



G1 Hy, Ak

Structure attributes must be viewed using STN Express query preparation.

=> s 11
SAMPLE SEARCH INITIATED 15:28:46 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 5 TO ITERATE

100.0% PROCESSED 5 ITERATIONS 0 ANSWERS SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
PROJECTED ITERATIONS: 5 TO 234
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s 11 sss full FULL SEARCH INITIATED 15:28:51 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 169 TO ITERATE

100.0% PROCESSED 169 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

L3 0 SEA SSS FUL L1

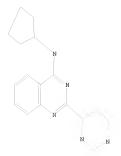
Uploading C:\Program Files\STNEXP\Queries\10552426newpyrim.str

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:CLASS 19:Atom 20:Atom

L4 STRUCTURE UPLOADED

21:Atom 22:Atom 23:Atom

=> d 14 L4 HAS NO ANSWERS L4 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 14

SAMPLE SEARCH INITIATED 15:30:45 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED -5 TO ITERATE

100.0% PROCESSED 5 ITERATIONS

SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE** **COMPLETE** BATCH PROJECTED ITERATIONS: 5 TO 234 PROJECTED ANSWERS: 0 TO

L5 0 SEA SSS SAM L4

=> s 14 sss full FULL SEARCH INITIATED 15:30:50 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED -169 TO ITERATE

100.0% PROCESSED 169 ITERATIONS 2 ANSWERS SEARCH TIME: 00.00.01

L6 2 SEA SSS FUL L4

=> d scan

REGISTRY COPYRIGHT 2009 ACS on STN

1H-Inden-2-ol, 2,3-dihydro-1-[[2-[2-(methylthio)-4-pyrimidinyl]-4-IN quinazolinyl]amino]-, (1S,2R)-

MF C22 H19 N5 O S

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

- 2 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
- 1H-Inden-2-ol, 1-[[2-(2-amino-4-pyrimidiny1)-4-quinazoliny1]amino]-2,3-dihydro-, (15,2R)- (21 H18 N6 O ΙN
- MF

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

Uploading C:\Program Files\STNEXP\Queries\10552426meta.str

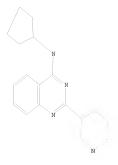
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:CLASS 19:Atom 20:Atom

L7 STRUCTURE UPLOADED

21:Atom 22:Atom 23:Atom

=> d 17 L7 HAS NO ANSWERS L7 STR

Match level :



Structure attributes must be viewed using STN Express query preparation.

=> s 17

SAMPLE SEARCH INITIATED 15:32:55 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED -5 TO ITERATE

100.0% PROCESSED 5 ITERATIONS

SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE** **COMPLETE** BATCH

PROJECTED ITERATIONS: 5 TO 234 PROJECTED ANSWERS: 0 TO

0 SEA SSS SAM L7

=> s 17 sss full

FULL SEARCH INITIATED 15:33:00 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 312 TO ITERATE

100.0% PROCESSED 312 ITERATIONS

9 ANSWERS SEARCH TIME: 00.00.01

L9 9 SEA SSS FUL L7

=> d scan

9 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN

4-Quinazolinamine, N-cyclopentyl-2-(3-pyridinyl)-IN

MF C18 H18 N4

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):8

- 9 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
- IN 4-Quinazolinamine, N-(2,3-dihydro-1H-inden-1-y1)-2-(3-pyridiny1)-C22 H18 N4

MF

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- REGISTRY COPYRIGHT 2009 ACS on STN
- IN 1H-Inden-2-ol, 1-[[2-(4-amino-3-pyridinyl)-4-quinazolinyl]amino]-2,3dihydro-, (1S,2R)-
- C22 H19 N5 O MF

- L9 9 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
- IN Cyclopentanol, 2-[[2-(3-pyridinyl)-4-quinazolinyl]amino]-, (1R,2R)MF C18 H18 N4 O

Absolute stereochemistry.

- **PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
- L9 9 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
- IN 1H-Inden-2-ol, 2,3-dihydro-1-[[2-(3-pyridinyl)-4-quinazolinyl]amino]-, (1S,2R)-
- MF C22 H18 N4 O

- L9 9 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
- IN 4-Quinazolinamine, N-cyclopentyl-6,7-dimethoxy-2-(3-pyridinyl)-
- MF C20 H22 N4 O2

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L9 9 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
- IN 2(1H)-Pyridinone, 5-[4-[[(1S,2R)-2,3-dihydro-2-hydroxy-1H-inden-1-yl]amino]-2-quinazolinyl]-
- MF C22 H18 N4 O2

- L9 9 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
- IN 1H-Inden-2-ol, 2,3-dihydro-1-[[2-(6-methoxy-3-pyridiny1)-7-
- (trifluoromethyl)-4-quinazolinyl]amino]-, (1S,2R)-MF C24 H19 F3 N4 O2

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L9 9 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
- IN 1H-Inden-2-ol, 2,3-dihydro-1-[[2-(3-pyridinyl)-4-quinazolinyl]amino]-, (1R,2S)-
- MF C22 H18 N4 O

ALL ANSWERS HAVE BEEN SCANNED

=> fil cap
COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST 560.74

FILE 'CAPLUS' ENTERED AT 15:33:40 ON 28 APR 2009 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 28 Apr 2009 VOL 150 ISS 18 FILE LAST UPDATED: 27 Apr 2009 (20090427/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 19 L10 1 L9

=> d ibib abs

L10 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:902403 CAPLUS

DOCUMENT NUMBER: 141:374752

TITLE: Heterocyclic compound modulators of kinases,

particularly Tie-2 kinase, and use in the treatment of

kinase-dependent diseases

INVENTOR(S): Ibrahim, Mohamed; Leahy, James; Sangalang, Joan C.;

Schnepp, Kevin; Shi, Xian; Nuss, John

English

PATENT ASSIGNEE (S): Exelixis, Inc., USA

SOURCE: PCT Int. Appl., 91 pp.

CODEN: PIXXD2 DOCUMENT TYPE: Patent

LANGUAGE:

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

		TENT :				KIN)	DATE								_	ATE		
		2004				7.2	-	2004					11510				0040		
						A3 20050317								20010100					
		W:						ΑU,											
								DE,											
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KΡ,	KR,	ΚZ,	LC,	
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NA,	NI,	
								PL,											
			ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	YU,	ZA,	ZM,	ZW	
		RW:	BW,	GH,	GM,	KE,	LS,	MW,	ΜZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	
			BY,	KG,	ΚZ,	MD,	RU,	ΤJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	
			ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	
			SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	
			TD,	TG															
	AU	2004	2309	28		A1		2004	1028		AU 2	004-	2309:	28		2	0040	408	
	CA	2520	323			A1		2004	1028		CA 2	004-	2520	323		2	0040	408	
	EP	1610	774			A2		2006	0104		EP 2	004-	7498	93		2	0040	408	
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
			ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	PL,	SK,	HR
		2006						2006											
	US	2007	0161	651		A1		2007	0712		US 2	005-	5524	26		2	0051	007	
PRIOR	RITY	APP.	LN.	INFO	. :						US 2	003-	4614	46P	1	P 2	0030	409	
											WO 2	004-	US10:	858		A 2	0040	408	

OTHER SOURCE(S): MARPAT 141:374752

> The invention provides compds. for modulating protein kinase enzymic activity for modulating cellular activities such as proliferation, differentiation, programmed cell death, migration and chemoinvasion. Compds. of the invention inhibit, regulate and/or modulate kinases, particularly Tie-2. Methods of using the compds. and pharmaceutical compns. thereof to treat kinase-dependent diseases and conditions are also an aspect of the invention. Preparation of quinazoline compds. of the invention is described.

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s 16L11 1 L6

=> d ibib abs

L11 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2004:902403 CAPLUS

DOCUMENT NUMBER: 141:374752 TITLE: Heterocyclic compound modulators of kinases,

particularly Tie-2 kinase, and use in the treatment of kinase-dependent diseases

INVENTOR(S):

Ibrahim, Mohamed; Leahy, James; Sangalang, Joan C.;

ADDITORTION NO

DATE

Schnepp, Kevin; Shi, Xian; Nuss, John

KIND DATE

PATENT ASSIGNEE(S): Exelixis, Inc., USA

SOURCE: PCT Int. Appl., 91 pp.

CODEN: PIXXD2 DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION: DAMENIE NO

	PATENT NO.					KIND DATE			APPLICATION NO.						DATE				
		2004				A2 20041028 A3 20050317				WO 2	004-	US10	858		20040408				
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
			CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,	
			NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	
			TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW	
		RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	
			BY,	KG,	KZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	
			ES,	FI,	FR,	GB,	GR,	HU,	IE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	
			SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	
			TD,	TG															
	AU	2004	2309	28		A1		2004	1028		AU 2	004-	2309	28		2	0040	408	
	CA	2520	323			A1		2004	1028		CA 2	004-	2520	323		2	0040	408	
	ΕP	1610	774			A2		2006	0104		EP 2	004-	7498	93		2	0040	408	
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
			IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	PL,	SK,	HR
	JP	2006	5232	38		T		2006	1012		JP 2	006-	5098	20		2	0040	408	
	US	2007	0161	651		A1		2007	0712		US 2	005-	5524	26		2	0051	007	
PRIOR	RIT	APP	LN.	INFO	. :						US 2	003-	4614	46P	1	P 2	0030	409	
											WO 2	004-	US10	858		A 2	0040	408	
OTHER	R S	DURCE	(S):			MARI	PAT	141:	3747.	52									
AB	The	e inv	enti	on p	rovi	des (comp	ds.	for 1	nodu	lati	ng p	rote.	in k	inas	e en	zymi	8	
	act	ivit	y fo	r mo	dula	ting	cel	lula	r ac	tivi	ties	suc	h as	pro.	life:	rati	on,		
	di:	ffere	ntia	tion	, pr	ograi	mmed	cel	l de	ath,	mig:	rati	on a	nd cl	hemo.	inva	sion		

Compds. of the invention inhibit, regulate and/or modulate kinases, particularly Tie-2. Methods of using the compds. and pharmaceutical compns. thereof to treat kinase-dependent diseases and conditions are also an aspect of the invention. Preparation of quinazoline compds. of the invention is described.

REFERENCE COUNT: 4

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> logoff

ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF

LOGOFF? (Y) /N/HOLD: v

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION 567.24 FULL ESTIMATED COST

SINCE FILE TOTAL ENTRY SESSION DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) CA SUBSCRIBER PRICE -1.64-1.64

STN INTERNATIONAL LOGOFF AT 15:34:32 ON 28 APR 2009